

MALINDI'S FUTURES

Challenges and Potentials of Anticipating Future Visions
Through Scenario Planning

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*“In a phase of deep and rapid change,
traditional planning instruments seem to be ineffective
because they are designed for situations of stability, certainty and reasonable clarity
on the problems to be addressed.”
(Albrechts 2017)*

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00. ABSTRACT

Malindi town (population 110,000) located along the Indian Ocean coast is the largest urban center in Kilifi county, Kenya. The town’s economy focuses heavily on tourism. Rapid tourism development during the 1970s and 1980s has a significant social, economic and cultural impact on the local community. Furthermore, rapid urban growth combined with Malindi’s lack of urban planning regulations has led to deficient urban development decisions. In the recent decade, tourism in Malindi has declined considerably, leaving the town in socioeconomic downfall. Numerous resorts are now closed, and an alarming amount of locals find themselves unemployed and without proper training.

The first strategic urban development plan for Malindi was finalized in 2016, focusing primarily on land use regulations and infrastructure development strategies. Although it acknowledges the imperative need for Malindi to diversify its economy, the current urban development plan lacks a holistic vision. This thesis explores how scenario planning can be used to create a compelling future vision for Malindi, which would shape the urban development of the town. It uses literature review for understanding the context, analysis for recognizing the current challenges and opportunities, theoretical review for arguing the use of scenario planning, and lastly, scenario making for presenting the scenario planning methodology. The purpose of this work is to demonstrate the usability of scenario planning and to build knowledge regarding scenario making.

Four scenarios are formed based on research and analysis. They all aim at generating urban rejuvenation; integrating local culture, values, and traditions; raising the quality of life; and empowering local communities towards economic growth. In the first two scenarios, Malindi recognizes the current decline in international touristic interest as an opportunity to redirect its strategy towards attracting more Kenyan and East African visitors. The first scenario focuses on integrating informal communities, supporting the development of local businesses, and emphasizing local culture and values. The second scenario focuses on environmental sustainability, green economic growth, and building a circular economy based on agro-industrial ecological development. The third scenario focuses on improving the livelihoods of the suburban communities and building human capacity and describes Malindi’s development following the support of agricultural entrepreneurship. The final scenario explores how Malindi urban fabric develops if the local government continues to strive to attract international tourism while pursuing economic growth by supporting commerce and services.

The future opportunities that emerge from the four scenarios provide meaningful insight into viable possibilities for future development of Malindi.

Keywords: unplanned tourism development, urbanization, unplanned urban development, futures studies, scenario planning.

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GLOSSARY

BUSINESS-AS-USUAL SCENARIO
“a scenario for future patterns of activity which assumes that there will be no significant change in people’s attitudes and priorities, or no major changes in technology, economics, or policies, so that normal circumstances can be expected to continue unchanged” (Park and Allaby, 2017).

BUSINESS ECONOMY
a grouping of economic activities which focuses on commerce; it includes industry, construction, retail, services; it excludes agriculture, fishing, and the public sector.

CIRCULAR ECONOMY
a regenerative economic model which supports sustainability by minimalizing waste and resource consumption, and encouraging recycling and reuse (Black 2012).

GREEN (ECONOMIC) GROWTH
economic growth which is environmentally sustainable (Park and Allaby, 2017).

INFORMAL SETTLEMENT
a dwelling that is not connected to clean water, lacks sanitation equipment, is structurally unstable, does not offer adequate living space, and/ or lacks land ownership security (UN-Habitat 2016d, 1).

KNOWLEDGE ECONOMY
“an economy in which the production and management of knowledge is a significant component of total output” (Black 2012).

LEAST DEVELOPED COUNTRIES
“countries that, according to the United Nations, exhibit the lowest indicators of socioeconomic development, with the lowest Human Development Index ratings of all countries in the world” (Saner, Yiu, and Filadoro 2015, 1).

MARICULTURE
cultivating seafood (aquaculture) in the open ocean.

RENEWABLE ENERGY
energy obtained from renewable natural sources (such as sun, wind, tide and wave power, geothermal heat, biomass) (Hashimzade 2017).

RURAL - URBAN LINKAGE
“complementary and synergetic functions and flows of people, natural resources, capital, goods, employment, ecosystem services, information, and technology between rural, peri-urban and urban areas” (Habitat III 2015, 1).

SUSTAINABLE TOURISM
tourism development, which accounts for the socioeconomic, cultural, and environmental condition of the host area, ensuring its feasibility over unlimited time (Irandu 2006, 191).

ABBREVIATIONS

- CBD = central business district
- CIDP = County Integrated Development Plan (referring to Kilifi CIDP)
- IDCK = International Design Collaboration for Kenya
- ISUDP = Integrated Strategic Urban Development Plan
- KCG = Kilifi County Government
- KISIP = Kenya Informal Settlement Improvement Programme
- KNP = Kenya Municipal Program
- NGO = non-governmental organization
- UN-HABITAT = United Nations Human Settlements Programme

01.
R E L E V A N C E

02.
R E S E A C H Q U E S T I O N

03.
T H E S I S S T R U C T U R E

I N T R O



Inside Shella Village, Malindi 2016 (own image)

0.1. RELEVANCE

The advance of science and general knowledge has generated new forces of development. Global trends are marked by uncertainty, rapid advancement, and constant change. The most discussed megatrends affecting societies are rapid urbanization, global warming and depletion of resources, changes in global economic dominance, advancements in technology, and sociodemographic changes (EEA 2015; Retief et al. 2016; PwC 2016; PwC2018).

Half of the Earth's population lives now in urban centers, which account for barely 3% of the world's land (UN-Habitat 2012). The estimations are that, by 2050, 80% of people will live in the cities, while the urban population of emerging nations will double (EEA 2015). Santa Fe Institute researchers estimate that, when the population of an urban center grows, the economic productivity increases by "15% more than the expected linear growth" (Bettencourt and West 2010). However, developing countries do not experience the same correlation between urban and economic growth (UN-Habitat 2012, 38).

Rapid urbanization in the developing world is linked to the formation of informal settlements, and the current estimate is that, worldwide, one in seven people lives in slums. Some East African countries experience an alarming proportion of urban dwellers living in informal settlements: the estimate for Ethiopia is 79.1% and in Madagascar 78% of urban population lives in slums (EEA 2015; UN-Habitat 2014, 165).

In recent years, different schools of architecture have been trying to address global development issues. The Department of Architecture at Aalto University recently celebrated 25 years of education in "global sustainability and humanitarian development" aimed at building cultural understanding and strengthening global awareness (Hollmén 2018, 16). Five years ago, the *Interplay of Cultures* course (then called *Cities in Transition*) took an interdisciplinary approach, bringing together students of different backgrounds. The course raised awareness over the complex reality of the developing world and encouraged addressing local challenges through co-creative solutions.

The work conducted in Tanzania under the *Cities in Transition* course during spring 2013 inspired the author to pursue a thesis topic that would contribute to the field of global sustainability. The experience of the Tanzania workshop focused on analyzing local conditions, interacting with communities and understanding their needs, holding regard for local values and traditions, and building sustainable solutions. It inevitably contributed to raising consciousness regarding the role of urban planning in a globalizing world, and the need for planners to be more engaged in addressing urban challenges in developing countries.



Inside Shella Village, Malindi 2016 (own image)

East Africa is the fastest urbanizing region of the world (UN-Habitat 2014, 146). The estimations are that within the next ten years the urban population of this region will increase by 50% (147). East African countries are confronted with considerable challenges as they try to manage rapid urbanization and address urban informality. In the last decade, UN-Habitat has taken an active role in supporting and guiding the East African countries in navigating rapid urban growth.

In recent years, Kenya has made a considerable effort to address current urban challenges by investing in infrastructure and urban development planning in many emerging urban centers, in its pursuit to manage urban growth. Nevertheless, 56% of Kenya's urban dwellers still reside in informal settlements (UN-Habitat 2016d, 11). Only one out of four urban households are connected to the central sewage and water supply system (UN-Habitat 2015a, 12). The estimation is that in the next decade the urban population of Kenya will increase by seven million people (UN-Habitat 2014, 147), and by 2050 the urban population will equal the rural population (UN-Habitat 2016a, 5).

This thesis follows up on the recent efforts made in Kenya towards sustainable urban development. It takes particular interest in the case of Malindi, a Kenyan town located along the Indian Ocean coast, where the delayed establishment of urban planning regulations has led to complex urban challenges. Malindi town is chosen for its rich history and vibrant social environment, as well as the complexity regarding

its urban development. Furthermore, the author explored Malindi in spring 2016, intrigued by the UN-Habitat *International Design Competition for Kenya* (which took place at that time), and the observations made during that visit created the base for further research. This study responds to gaps left uncovered by the *International Design Competition for Kenya* (IDCK).

Following the principles learned during the *Cities in Transition* field trip, this study focuses on understanding the realities of the local conditions, careful analysis of the current situation, recalling local culture, values and traditions, and respecting the aspirations of a different culture. Therefore, this work does not seek to provide planning solutions on behalf of Malindi, nor to propose design ideas. Instead, it aims at empowering the local community to prepare for possible global changes by exploring multiple scenarios directed at raising the quality of life.

The thesis demonstrates the usability of scenario planning in the case of Malindi and builds knowledge regarding scenario making. As a result, the study creates a framework of practical tools for addressing complex situations with the help of scenario planning. Subsequently, four scenarios are built to exemplify the method. They form the basis for future discussion.

HOW CAN SCENARIO PLANNING FACILITATE A STRONGER VISION FOR SUSTAINABLE URBAN RENEWAL AND ECONOMIC DEVELOPMENT IN MALINDI ?

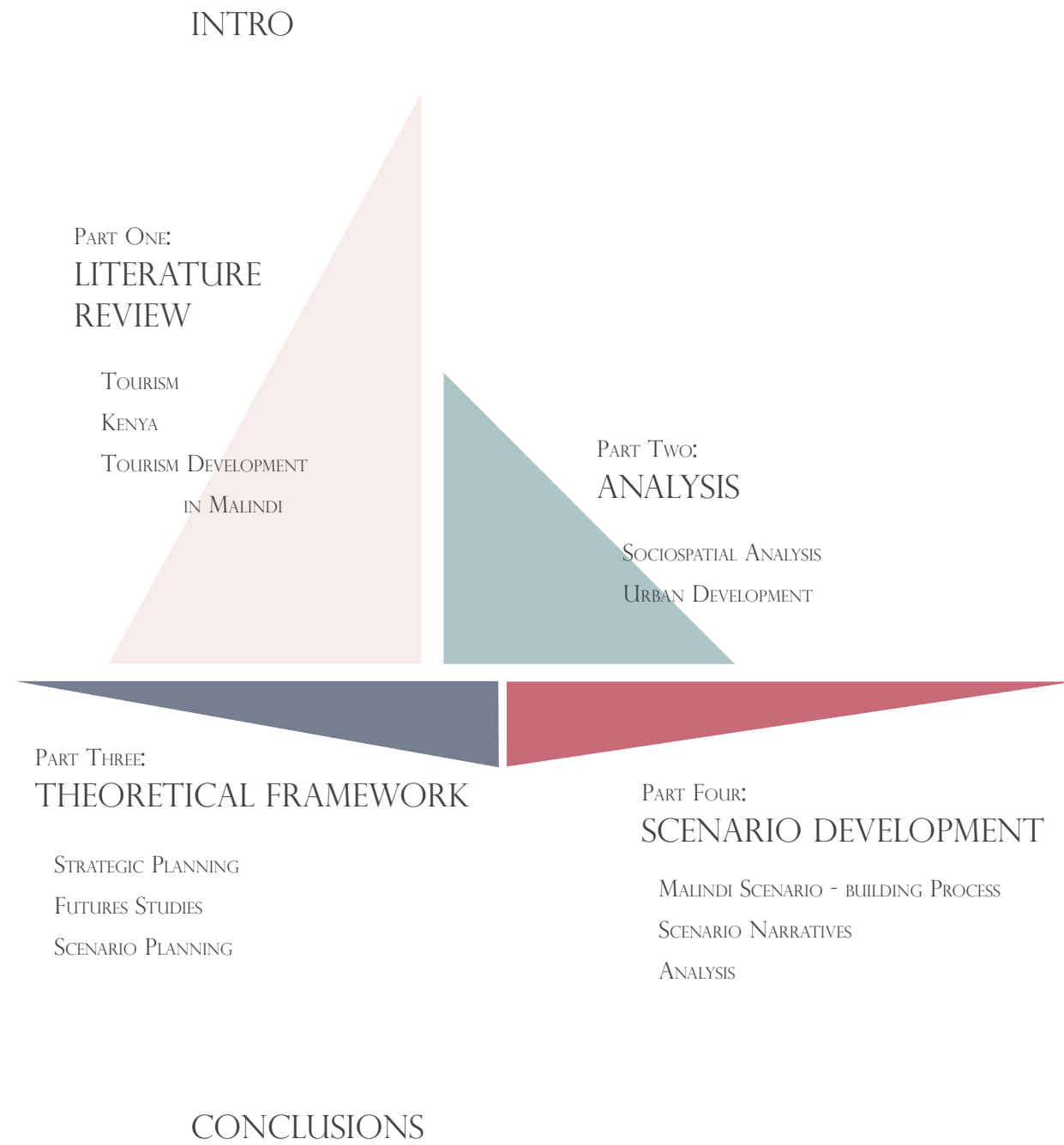
0.2. RESEARCH QUESTION

During the 1970s and 1980s, the tourism industry in Malindi experienced astonishing growth. In order to better understand the context of the current socioeconomic and urban development of the town, the first part of the thesis researches the effects of international tourism development in Kenyan coastal towns. More specifically: *what is the relation between international tourism and socioeconomic development in Malindi?*

The vast majority of Malindi's economy is directly or indirectly dependent on tourism. Even though most tourist facilities are owned by foreigners, Malindi government invests heavily in promoting tourism. However, the tourism industry in Malindi is currently in decline, inevitably affecting the local economy. Malindi is facing many challenges related to informal settlements, inadequate infrastructure, and environmental degradation. Nevertheless, socioeconomic, cultural, and educational values must not be overlooked in the process of incrementally solving the condition of the urban environment. *How can urban planning address the current challenges Malindi is facing in the context of rapid urbanization and socioeconomic depreciation?*

In the context of a rapidly changing world, urban planning has the accentuated responsibility to account for complex futures, building resilience against uncertainty. Traditional planning approaches are not equipped to tackle uncertainties, because they are unable to adapt to change. In Malindi, the current strategic development plan takes an incremental approach, focusing on addressing the urgent needs related to developing the infrastructure and upgrading informal settlements. The question is then, *how can strategic urban planning address complex situations marked by uncertainty and unpredictability?*

Exploring uncertain futures is a subject observed by futurology; therefore, the method employed in this study was found in the field of futures studies. This leads to the leading research question of the thesis: *How can scenario planning facilitate a stronger vision for sustainable urban renewal and economic development in Malindi?*



0.3. THESIS STRUCTURE

PART ONE: LITERATURE REVIEW

The first part of the thesis researches the impact of rapid tourism growth on Kenyan coastal towns, and specifically, the influence international tourism had on the social, economic, and urban development of Malindi. The chapter starts by briefly examining the impact of international tourism on host communities, identifies future tourism trends, and discusses the Butler tourism life cycle model. It then gives an overview of the circumstances surrounding the current socioeconomic state of Malindi: it describes the history of the Kenyan coast, the Swahili culture, the context of urbanization and urban informality in Kenya with specific reference to Malindi town, and the specific influence international tourism has on Malindi. In the end, the Butler tourism life cycle model is tested against the Malindi tourism development, and strategies for rejuvenation are proposed.

PART TWO: ANALYSIS: CURRENT SITUATION

The second part of the thesis further analyzes the current situation of Malindi town. It examines the sociospatial conditions, describing the natural features of the area and recognizing the critical challenges Malindi is facing. It also discusses the recent efforts made by the local government to establish urban planning regulations and to address the town's vital needs.

Furthermore, this part of the thesis considers the limitations of the current urban development plan and subsequently evaluates opportunities and untapped potential for economic development. Together with the background research of the previous section, the findings of this chapter form the basis for scenario making.

PART THREE: THEORETICAL FRAMEWORK

The third part discusses the shortcomings of traditional strategic planning and proposes scenario planning as a tool for steering strategic choices towards a compelling long-term vision. It offers a thorough description of the methodology behind scenario planning and its application in urban planning.

PART FOUR: SCENARIO DEVELOPMENT

Finally, the scenario planning method is applied to the Malindi case, with the aim of demonstrating its usability and building knowledge regarding scenario making. Following the explorative scenario framework, and based on the findings from the first two chapters, four different scenarios are built. The methods used to present the scenarios are scenario diagram and scenario narratives.

1.
TOURISM

2.
KENYA

3.
TOURISM
DEVELOPMENT
IN MALINDI

This section starts with a brief discussion about the impact of international tourism on host communities and future tourism trends. It then gives an overview of the context, describing the history of the Kenyan coast, with specific reference to Malindi, the influence of international tourism on the social, economic and urban development of Malindi, and the current situation of the town.

PART ONE

LITERATURE
REVIEW

1. TOURISM

“The assumption that tourist areas will always remain tourist areas and be attractive to tourists appears to be implicit in tourism planning, . . . it is taken for granted that the number of visitors will continue to increase.” (Butler 1980, 10)

INTERNATIONAL TOURISM IN A GLOBAL CONTEXT

International tourism can be traced back to the Roman Empire when Romans kept villas in the newly conquered lands of the Empire and brought back souvenirs. In later years, towards the end of the middle ages, international tourism developed strongly in the form of religious pilgrimage (Belk and Costa 1995, 34). Today, international tourism is a significant economic activity: a global industry generating foreign exchange, employment, and significant revenue.

Effective tourism strategies create business opportunities, provide employment even for unskilled workers, and trigger life quality improvement by creating demands for new products (Saner, Yiu and Filadoro 2015, 2). Tourism activity is interconnected with other economic industries, and it can spread income to other sectors which support tourism. Tourism growth brings along an increasing number of visitors as well as increased job opportunities, which generates local population growth and new settlements (Kibicho 2005, 258). Increased population growth raises the demand for natural resources and adds pressure on the environment. In coastal tourist regions, deforestation to build more hotels or residential homes leads to beach

erosion and landscape destruction (Schoorl and Visser 1991, 2).

Global travel and tourism is one of the most rapidly expanding industries worldwide. In 2012, the tourism industry increased by four million jobs. That year, Sub-Saharan Africa was one of the most popular tourist destination regions (Saner, Yiu and Filadoro 2015, 3).

THE COSTS AND BENEFITS OF INTERNATIONAL TOURISM

Tourism development is accompanied by both positive and negative impacts on the host location, on a number of aspects: social-economic development, cultural development, foreign exchange earnings, housing and infrastructure development, environmental impact. Belk and Costa (1995) do an explicit job of discussing the benefits and problems that international tourism create.

On the plus side, international tourism brings rapid economic growth, helps earn foreign exchange, may stimulate environmental and cultural conservation, and promotes intercultural understanding which can “nurture world peace” (Belk and Costa 1995, 33). International tourism

is a distinguishably reliable economic industry in times of national economic depression (38). It has the power to bring together people of diverse backgrounds, and it reinforces the reality of globalization. Tourism development can be a factor affecting the apparition of new settlements when people from other areas arrive to work in the industry (Kibicho 2000, 118). Moreover, it also influences urban planning and infrastructure development, which need to answer new tourism-related demands, and stimulates entrepreneurship (Belk and Costa 1995, 38).

On the negative side, international tourism has a changing effect on local cultures which try to adapt to the tourists’ expectations. International tourism may also bring increasing dependence,

exploitation, resistance and community disruptions (Belk and Costa 1995, 40; Jamison 1999a, 8). Tourism growth can cause unplanned urban development, uncontrolled sprawl, and an increase in building costs and land values (Kitsao 2010). Raised housing prices are primarily affecting the youth and the economic migrants. Rapid tourism growth can also be damaging to the natural environment.

Belk and Costa summarize the disadvantages of tourism in developing counties as “financial exploitation of the Third World, erosion of cultures, expansion of gaps between haves and have-nots, and creation of a world geared to the production of hollow spectacles” (Belk and Costa 1995, 33).

INTERNATIONAL TOURISM: BENEFITS AND PROBLEMS

POSSIBLE BENEFITS	POSSIBLE PROBLEMS
Relatively stable industry; Produces little pollution; Source of employment; Incentive for education; Source of hard currency; May positively affect trade balance; Multiplier effect; Incentive fore entrepreneurial activity; Main increase the local standard of living; May stimulate conservation; May strengthen domestic culture; May promote international understanding;	Resentment toward tourists; Cultural imperialism; Increased vulnerability / dependency of local economic system; Social and cultural disruptions; Boom and bust cycle; Lack of local control and benefit; Inflation; Environmental degradation;

image 1. Benefits and Problems of International Tourism (Belk and Costa 1995)

THE BUTLER MODEL:
6-STAGE TOURISM LIFE CYCLE

“Only in the case of the truly unique area could one anticipate an almost timeless attractiveness, able to withstand the pressures of visitation.”
(Butler 1980, 9)

Tourist destinations are dynamic: altering and progressing with time. Tourism development impacts the host society, culture, economy, and environment. In return, the changes that the host location faces impact tourism development. Butler (1980) proposed one of the most acknowledged tourist life cycle models. The Butler Model describes a six-stage cycle of evolution of tourism area development (Butler 1980):

1. EXPLORATION

At first, few adventurous tourists explore an undeveloped location and interact with the local community. They do not create a significant change in the local economy or social life. The destination does not have any tourist facilities, and what attracts tourists to the area is mainly unspoiled scenery and cultural richness.

2. INVOLVEMENT

During the second stage, the local community responds to visitors by starting to develop servicing facilities and begins advertising to attract more visitors. More tourists are coming as a result of investment in tourist infrastructure: lodgings, restaurants, streets, transportation hubs.

3. DEVELOPMENT

The third stage is characterized by accelerated tourism advancement. Outside investment takes hold of the area (government or international companies become main investors), and local participation declines. There are notable developments in the area to facilitate tourism.

4. CONSOLIDATION

During the forth stage, a considerable segment of the local economy is dependent on tourism. The tourist carrying capacity is starting to exceed the level of development and tourism growth rate is in decline. At this point, the residents attitudes starts to shift from approval to opposition.

5. STAGNATION

At this point, the maximum number of tourists has already been experienced. Social, economic and environmental problems emerge. Although the location is well known, it has now lost its distinction and popularity, and even though high advertising efforts are made, the location is unable to compete with newer destinations.

6. DECLINE

As tourists are drawn by newer destinations, and the location experiences surplus capacity, the tourism life-cycle enters the sixth stage, decline. Decline can be influenced by emerging competitors, negative publicity, political instability, land scarcity, environmental deterioration, resource depletion, resentment by the local population, or overcrowding. Some tourist facilities are forced to close or are converted into retirement homes or apartments.

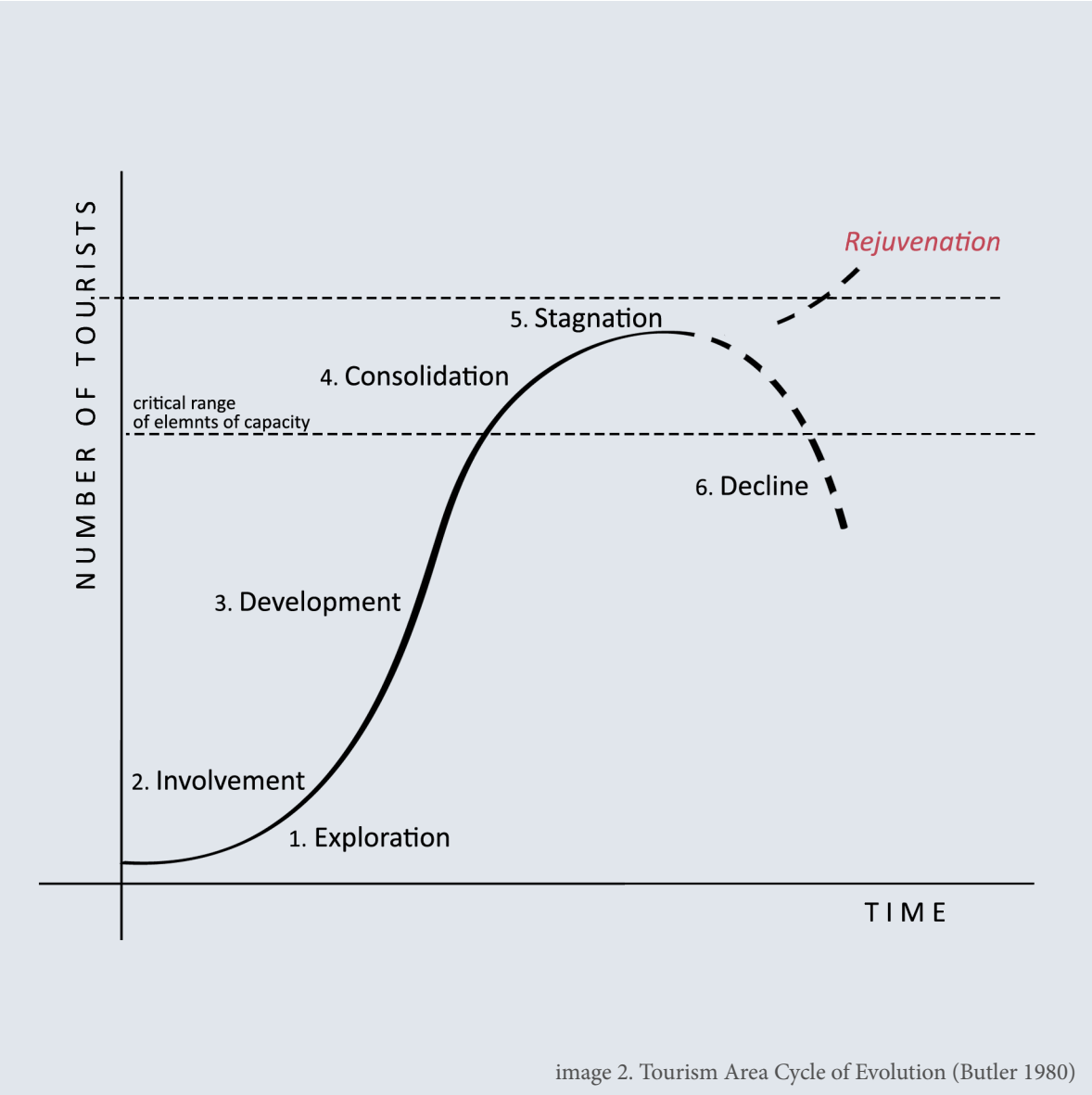


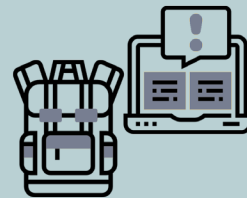
image 2. Tourism Area Cycle of Evolution (Butler 1980)

REJUVENATION

“it is almost certain that this stage will never be reached without a complete change in the attractions on which tourism is based.”
(Butler 1980, 9)

Decline can be avoided with a radical shift in touristic strategy and vision. Some efficient strategies to achieve rejuvenation have been taking advantage of unused resources, developing alternative touristic products, designing new artificial attractions which give the location a new direction, or organizing special events (Butler 1980, 9). Of course, all these strategies can be adopted by competing markets. Redesigning the touristic strategy takes investment and focused active effort. A good strategy in reaching rejuvenation is developing a niche tourism strategy. Diversion and contradictions between public and private interests create real challenges to achieving rejuvenation.

Butler (1980) argues that, eventually, even rejuvenated locations will experience decline (9). Therefore, it is imperative for touristic destinations to diversify their economy.



FUTURE TOURISM TRENDS

“..as the world has moved to an experience economy in which endless choice through competition and accessibility because of the low cost carrier, what has emerged is the concept of fluid identity.”
(Yeoman 2012, 7)

Emerging tourism trends are culinary tourism, work and travel opportunities, working from “home” away from home (“digital nomads”), community-focused hotels, health-conscious travel, solo travelers, and modern family travelers. Traveler motivations are becoming increasingly diverse, making it harder to plan for a certain “type” of tourist. Instead of focusing on planning for a specific tourist type, a better strategy might soon be to approach the idea of personalized experiences and customization (Talwar 2012, 23).

Tourist consumption is driven by the desire for choice and new experiences. Tourists today are constantly looking to try new and diverse adventures, often making the tourism experience about “collecting countries” (Yeoman 2012,8). On the other hand, as wealth decreases, the desire for simplicity emerges, and this could be a new emerging trend for domestic vacations or stay-put vacations (8).

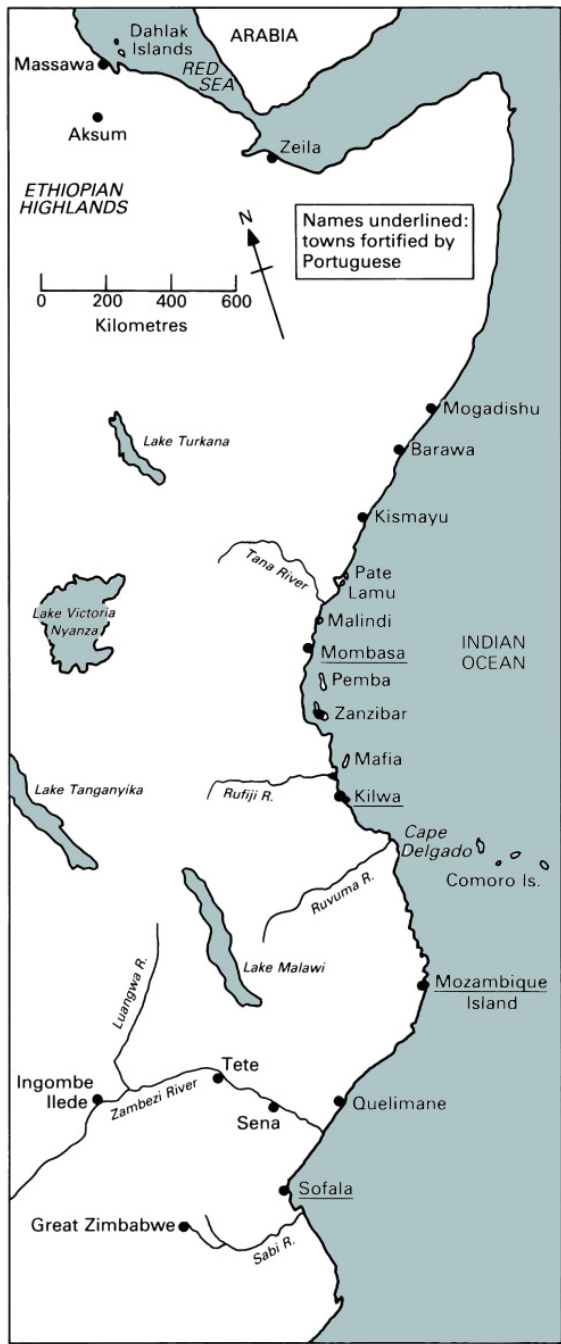
The global recession of the last decade shook the world’s economic power stability. There is a decline in incomes in the developed world. As Germany, Italy and the UK are reforming pension policies, generation X & Y might likely retire with fewer pensions than previous generations, unless they keep longer careers (Yeoman 2012, 5). This circumstance will affect senior tourism trends post 2050. Moreover, Asian countries show increasing interest in overtaking Western economies (4).

The Asian middle class will dominate the future international traveler class (Talwar 2012, 22). An interesting idea is alliances between cities or countries, which could be a favorable move for tourism in the future.



image 3. Tourism Trends

2. KENYA



A SHORT HISTORY OF KENYA AND THE KENYAN COAST

The first inhabitants of present-day Kenya were hunters and food gatherers belonging to the Khoisan family. Between 3500-1000 BC agro-pastoralist southern Cushites people from the Horn of Africa migrated south into modern-day Kenya. They lived in peace with the Khoisan hunters, and traded goods (Ehret 2002, 122). In the second and third century AD, the cultivating Bantu population moved to East Africa and brought new agricultural developments and ironworking (Ajayi and Crowder 1985, 11). In the sixteenth century, Maa speaking people, who are the ancestors of the current day Maasai people, lived in the grasslands north of Mount Kenya (Ehret 2002, 394).

By the ninth century, coastal Swahili communities were greatly involved in the Indian Ocean trade and slowly flourished into stone built harbor towns (Ehret 2002, 248). They traded ivory and slaves and imported Indian textiles and porcelain from China (Ajayi and Crowder 1985, 38). Swahili coastal towns kept little contact with inland Kenyans, often viewing themselves “culturally superior” (Ehret 2002, 379; Sindiga 1996b, 427). A natural barrier of arid land, the Taru Desert, complemented this limited connection, separating the coastal region from inland Kenya (Hoorweg, Foeken and Obudho 2000, 393). The coastal economy focused on fishing and international trade (Sindiga 1996b, 427). At the

same time, Kenya was also the home of pastoral communities who traveled periodically searching for new pastures and did not settle to develop towns (Ajayi and Crowder 1985, 30).

The Portuguese were the first Europeans to reach the Swahili coast. In 1497, Vasco da Gama sailed along the coast of Africa stopping in Mombasa and Malindi on his way to India (Ajayi and Crowder 1985, 31). Vasco da Gama planted a cross in Malindi, which was soon removed by the Islamic community. A bell-shaped monument was built instead, as a sailing guide for Portuguese traders. The Vasco da Gama pillar is the oldest European monument in Kenya. In their efforts to keep influence over the Indian Ocean trade, in 1593 the Portuguese settlers developed their regional administration in Mombasa and started building Fort Jesus (Amin and Willetts 1986). Trade routes being disrupted by the Portuguese, the Swahili civilization experienced a slow decline (Sindiga

1996b, 426) until the middle of the seventeenth century when local Omani Arabs, embittered with the Portuguese empire, set a successful siege on Fort Jesus and retook control of the coastal towns (Amin and Willetts 1986, 24).

With the installation of the Imperial British East Africa Company in 1888, Kenya fell under British influence (Ajayi and Crowder 1985, 60). At that time, Kenya had no political organization. Communities were managed by diverse local rulers (known as chiefs, ritual leaders or kings) who controlled the power with the help of authority, leadership, wealth, or fighting skills; or lead by councils made of community elders recognized for their wisdom and age (Hornsby 2012, 27). Alongside developing African trade, the British also built the Kenya-Uganda railway which reached Nairobi in 1899 (Ajayi and Crowder 1985, 60). Soon afterward, Europeans emigrated to Kenya, drawn by diverse farming

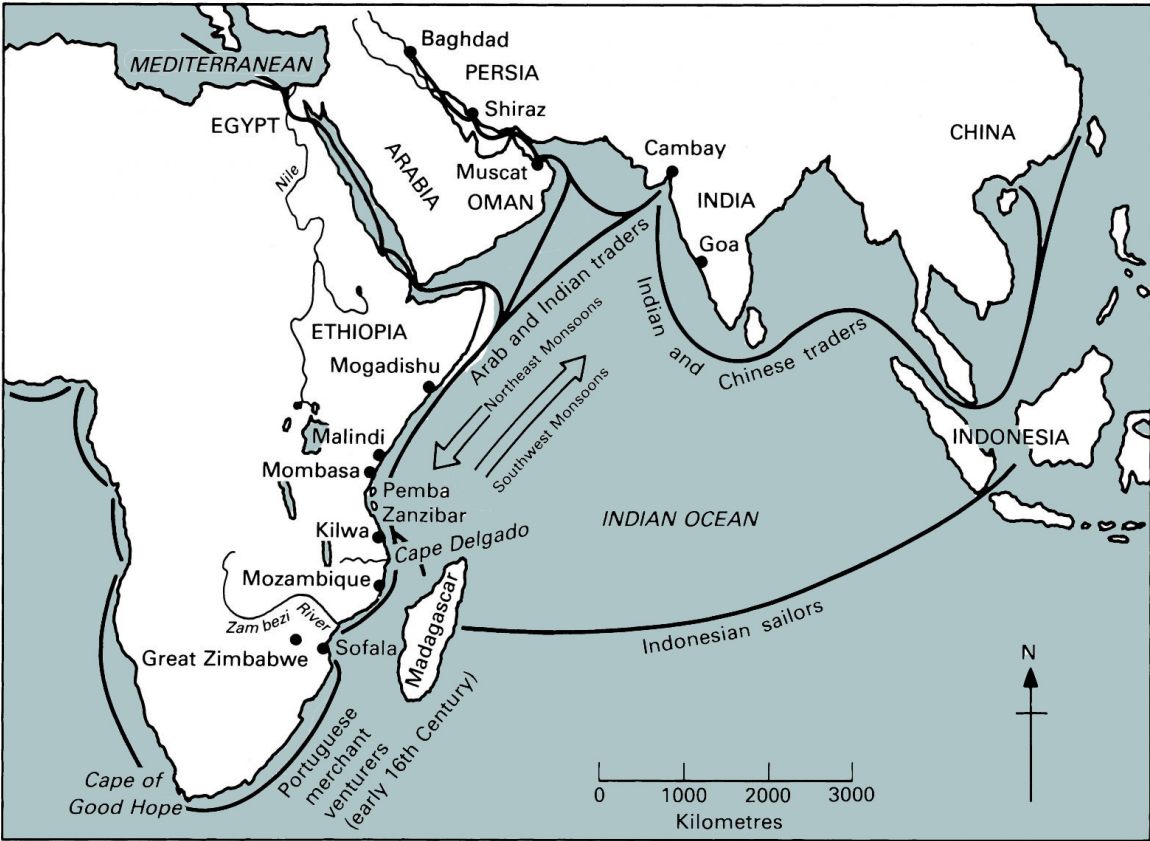


image 4. Swahili Towns and the Portuguese, 15-16th Centuries

image 5. Indian Ocean Trading Networks 10-16th Centuries

prospects combined with opportunities for an adventurous lifestyle. They settled in the central fertile highland region, now known as the White Highlands, and treated Africans as “their feudal subjects” (Hornsby 2012, 26).

In 1920, the East Africa Protectorate was turned into a British colony. The locals resented colonial rule. Strongly attached to Islam and with a distinct socioeconomic structure, the Swahili peoples’ cultural values collided with the British culture (Sindiga 1996b, 427). In the 1950s, the Mau Mau rebellion against British rule was the beginning step towards independence (Ajayi and Crowder 1985, 60).

On 12.12.1963, Kenya declared its independence from the United Kingdom, the last British colony in East Africa to achieve independence (Hornsby 2012, 19). Kenya’s first president was Jomo Kenyatta, Colonial Kenya’s former prime minister. He held Kenya’s presidential office for 14 years. Decolonization was a gradual process that lasted a decade, and Kenya faced many challenges. At that time, Kenya was the most urbanized country in East Africa even though only eight percent of the population lived in urban areas (21). In its search for progression, Kenya welcomed the United Kingdom’s patronage and cultivated economic relationships with the West (92). The early 1970s were a time of stability and steady development. Kenya relied heavily on Western investors who brought development, growth, and security.

FACTS AND FIGURES OF
REPUBLIC OF KENYA

*“Kenya is the economic, financial
and transport hub of East Africa.”*
(The World Fact Book)

According to C.I.A’s World Fact Book, today,

About 75% of Kenya’s population is involved in the agricultural sector, mostly farming and raising livestock. Agriculture is seen as “the backbone of Kenyan economy.”

Almost 40% of the current population is under the age of 15. Unemployment rates are high and economic development is threatened by weak governance, corruption, and inadequate infrastructure.

A significant portion of Kenya’s economy relies on tourism, and recent acts of terror by al-Shabaab groups from Somalia have negatively impacted the tourism economy.



image 6. Kenya and East Africa

LOCATION:	Eastern Africa, bordering the Indian Ocean, between Somalia and Tanzania
CAPITAL:	Nairobi
INDEPENDENCE:	12 December 1963 (from the UK)
GOVERNMENT:	Presidential Republic. President Uhuru KENYATTA (since 9 April 2013); Deputy President William RUTO; The president is both chief of state and head of government.
MAIN CITIES:	4.386 million NAIROBI (capital); 1.214 million Mombassa (2018)
NEIGHBOURS:	Ethiopia; Somalia; South Sudan; Tanzania; Uganda
TOTAL AREA:	580.367 sq km (land: 569.140 sq km; water: 11.227 sq km)
COASTLINE:	536 km
CLIMATE:	varies from tropical along coast to arid in interior
TERRAIN:	low plains rise to central highlands split by Great Rift Valley; fertile plateau in west
NATURAL HAZARDS:	recurring drought; flooding during rainy seasons; limited volcanic activity
ENVIRONMENT:	water pollution from urban and industrial wastes; water shortage and poor water quality from increased use of pesticides and fertilizers; flooding; water hyacinth infestation in Lake Victoria; deforestation; soil erosion; desertification; poaching
ISSUES	(July 2018 est.) 48.397.527; density: 83,39 /sq km
POPULATION:	(2018 est.) 0-14 years: 39,03%; 15-24 years: 19,61%; 25-54 years: 34,27%; 55-64 years: 4%; 65 years and over: 3,08%
AGE STRUCTURE:	(2018 est.) 20 years
MEDIAN AGE:	(2018 est.) 1.57%
POPULATION GROWTH RATE:	(2018 est.) 22.6 births/1,000 population
BIRTH RATE:	(2018 est.) 6.7 deaths/1,000 population
DEATH RATE:	(2017 est.) -0.2 migrant(s)/1,000 population
NET MIGRATION:	urban population: 27% of total population (2018 est.); rate of urbanization: 44,23%
URBANIZATION:	English (official), Kiswahili (official), numerous indigenous languages
LANGUAGES:	Kikuyu 17,2%; Luhya 13,8%; Kalejin 12,9%; Luo 10,5%; Kamba 10,1%; Somali 6,2%; Kisii 5,7%; Mijikenda 5,1%; Meru 4,3%; Turkana 2,6%; Masai 2,2%; other 9,4%
ETHNIC GROUPS:	(2009 est.) Christian 83% (Protestant 47,7%; Catholic 23,4%; other Christian 11,9%); Muslim 11,2%; Traditionalists 1,7%; other 1,6%; none 2,4%; unspecified 0,2%
RELIGIONS:	(2017 est.) GDP \$163,7 billion; GDP real growth rate 4,9%; GDP per capita \$3,500; Labor force 19,6 million; Unemployment rate 40% (2013 est.).
ECONOMY:	Population below poverty line: (2016 est.) 36,1%
NAT. RESOURCES:	limestone, soda ash, salt, gemstones, fluorspar, zinc, diatomite, gypsum, wildlife, hydropower
LAND USE:	(2011 est.) agricultural land 48.1% ; forest 6.1%; other 45.8%
AGRICULTURE:	tea, coffee, corn, wheat, sugarcane, fruit, vegetables; dairy products, beef, fish, pork, poultry, eggs;
INDUSTRIES:	small-scale consumer goods (plastic, furniture, batteries, textiles, clothing, soap, cigarettes, flour), agricultural products, horticulture, oil refining; aluminum, steel, lead; cement, commercial ship repair, tourism, information technology;
EXPORTS:	tea, horticultural products, coffee, petroleum products, fish, cement, apparel
EXPORT PARTNERS:	Uganda 10,8%; Pakistan 10,6%; US 8,1%; Netherlands 7,3%; UK 6,4%; Tanzania; UAE
IMPORTS:	machinery & transportation equipment, oil, petroleum products, motor vehicles, iron and steel, resins, plastics;
IMPORT PARTNERS:	(2017) China 22,5%; India 9,9%; UAE 8,7%; Saudi Arabia 5,1%; Japan 4,5%
ELECTRICITY:	(2016 est.) 9.634 billion kWh; consumption 7.863 billion kWh;
ELECTRIFICATION:	(2013) total population: 20%; urban areas: 60%; rural areas: 7%
CURRENCY:	Kenyan shilling (KES)

image 7. Facts and Figures of the Republic of Kenya (The World Fact Book)

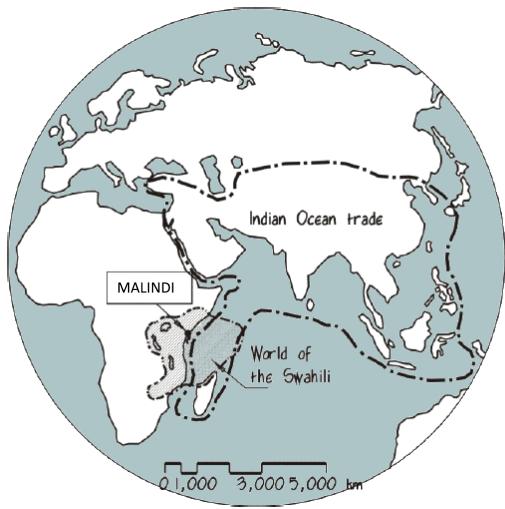


image 8. The Swahili Realm of Influence

SWAHILI ARCHITECTURE AND URBANISM

“The Swahili people are Africans; however, for several centuries, they have had strong relationships with the Middle East through trade and Islam.”
(Sindiga 1996b, 426)

The term *Swahili* comes from the Arabic *sahalu*, meaning coast.

The cultural roots of the Swahili society trace back to the coastal Bantu people who migrated into East Africa at the beginning of the first millennium. Along the Kenyan coast, these people cultivated rice and coconut palms and practiced fishing. In the eighth century, the Swahili communities adopted “a commercially orientated way of life” differentiating themselves from other inland communities through lifestyle and culture as they started being part of the

Indian Ocean trade. Coastal villages developed into stone-built towns (Ehret 2002, 248).

Alongside other African coastal towns, the old Swahili town of Malindi dating back to the ninth century, was part of a trade circle within the Indian Ocean. Together with trading goods, Arabs and Indians migrated to the East Africa Coast bringing with them the Islamic religion and further shaping the Swahili language and culture (Sudi 2013, 1106). Although strongly associated with the Islam religion, Swahili culture’s ancestry lies in Sub-Saharan Africa and is “an African culture in its own right” (Lauren 2014, 2).

Pre-colonial Swahili architecture is impressive, with architraves and intricately decorated doors carved out of hardwood by hand. The carved designs on doors are a mark of prestige and personal value (Niskanen 2006, 54). Most Swahili architecture tradition uses local materials: coral stone for the walls and mangrove poles for the ceiling (Lauren 2014, 9-10). The layout of Swahili homes focuses on progressive privacy and gender partition (12). Here rooms always have a set purpose. Interior spaces are decorated with niches, *zidaka*, a motif that signals prominence (93). Swahili space progresses from the public space of the street into the semi-public raised porch, *daka*, and then into the safety of the enclosed inner yard (97). The most private space of the home is located at the end of the house. The roofs are flat and terraced, thatched with palm tree leaves, *makuti* (Niskanen 2006, 54). Swahili settlements are often oriented towards the north (Lauren 2014, 175).

Swahili urbanism focuses on responses to a “service economy . . . [and] a complex system of social stratification” (Oers 2013, 8). Residential areas are cramped, with narrow, shaded streets (Niskanen 2006, 54). Commercial areas are

often informal street markets that reflect the community trading culture (Heathcott 2013, 25).

Excessive tourism activity has a pronounced impact on Swahili architecture and urbanism. Firstly, tourism development brings about increasing exposure to Western culture, which contaminates the local social identity. This slow loss of local culture and values to globalization is damaging the Swahili architectural heritage and degenerating the urban lifestyle (Sudi 2013, 1105). In the coastal town of Malindi, reports have shown Swahili architecture destroyed because decorations were stolen and sold in

the tourist markets (Kitsao 2010, 7-8). Tourism development also affects the urban environment of Swahili towns. Because streets in Swahili urban centers are often narrow, increased touristic activity causes traffic problems and congestions. Moreover, the development of tourism facilities (hotels, restaurants, night clubs, infrastructure) often oversteps local cultural values and change the use of public space and physical structures (Sudi 2013, 1111). However, tourism can also stimulate interest in protecting architectural tradition as it recognizes the need for cultural heritage conservation.

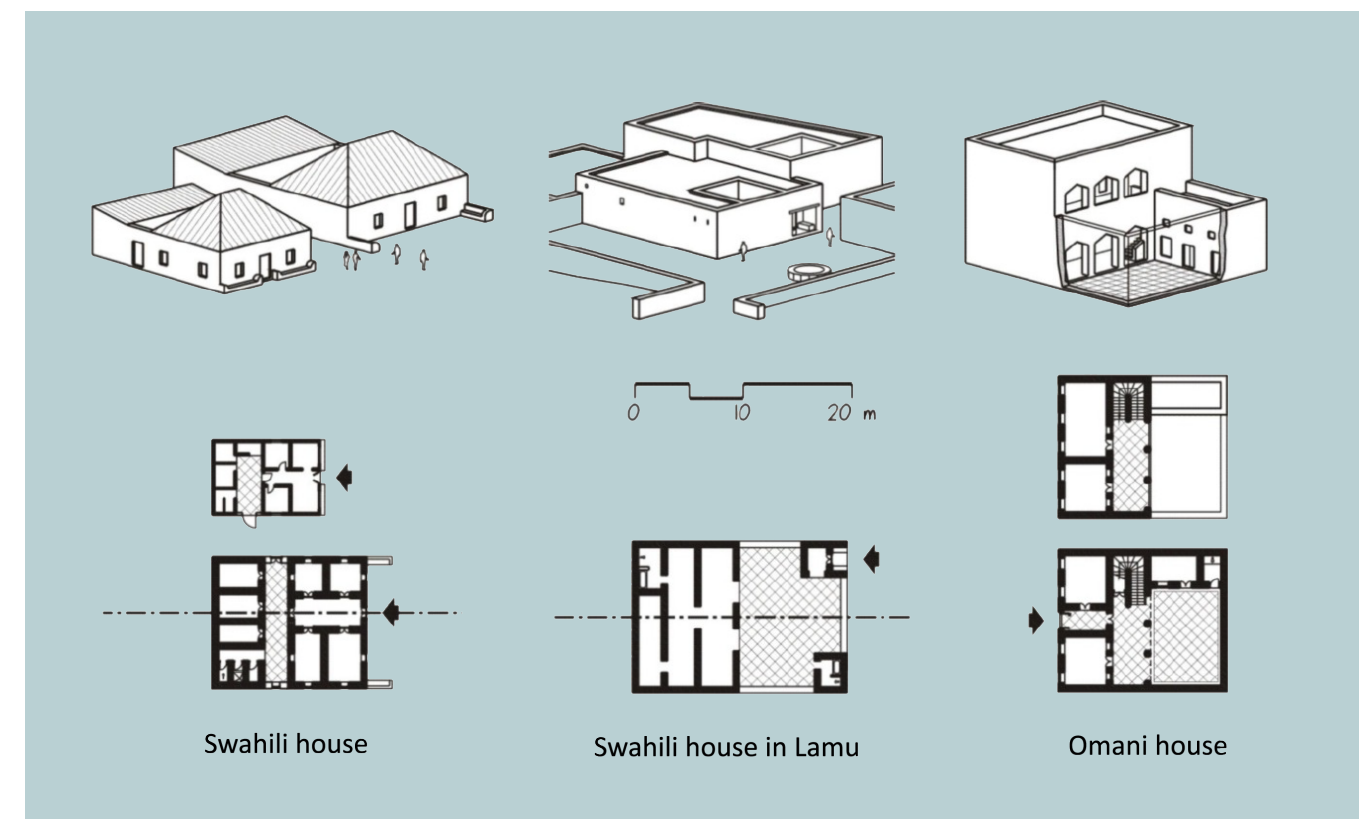


image 9. Swahili and Arab African Houses

SWAHILI TOWN STUDY:
GEDI RUINS

The Swahili region of the African Coast stretches from Zambezi River in Mozambique to northern Kenya. 16 km south of Malindi, along the Malindi - Mombasa road, lies the ruined Swahili town of Gedi.

Archaeologist James Kirkman estimates that Gedi was founded in the late 13th century and was occupied until the early seventeen century (Kirkman 1975, 15). Unlike other coastal towns, Gedi is built inland, not visible from the ocean (Amin and Willetts 1986, 84). Therefore, it was not discovered by early explorers, and there is no mention of it in any historical documents of that time.

Gedi was a fortified town, with two concentric barricade walls. The outer wall enclosed 18.2 hectares. The inner wall was built in the sixteenth century and enclosed seven hectares. The settlement accommodated over a hundred stone houses and a minimum of eight mosques (Lauren 2014, 171; Kirkman 1975). It is estimated that Gedi hosted 2500 people at the height of its existence (Amin and Willetts 1986, 84; Reynolds 2001, 44). The city of Gedi was abandoned in the sixteenth century. Kirkman suggests that it might have been destroyed by the people of Mombasa who were retaliating against Malindi after Malindi raided Mombasa in 1529 (Kirkman 1975, 15). It was shortly reoccupied at the end of the sixteenth century, and this is when the inner walls were constructed (Lauren 2014, 175). It was

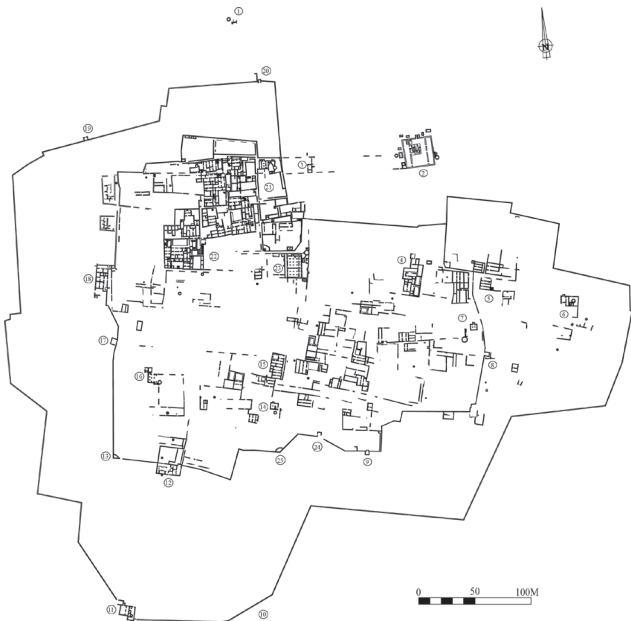


image 10. Gedi Ruins Site Plan, 2001

deserted again in the early seventeenth century, possibly due to the advance of the Zimba or Galla tribes from Somalia (Kirkman 1975, 16). No skeletons were found by the excavations, which would suggest that the population evacuated (Amin and Willetts 1986, 84).

Gedi's architecture displays a predilection for northerly orientation. The northern side of town is the most architecturally congested and many house entrances face north (Lauren 2014, 172). In this part of town, a regular street grid can be observed, suggesting that Gedi's urban layout was deliberate, planned, and not the random result of spontaneous urban growth.



image 11 - 12. Gedi Ruins , 2016 (own images)

URBANIZATION IN KENYA

“... transformation of rural areas and economies should be understood as simultaneous processes that are shaping urbanization in Kenya.” (UN-Habitat 2015a, 11)

In 2014, East Africa had the lowest percentage of urban population of all African regions (UN-Habitat 2014). At the same time however, it was also the region experiencing the fastest urban growth. Rapid urbanization in Kenya is foremost influenced by economic migration and population increase, and it brings along considerable spatial, social and economic challenges that Kenyan cities must address.

THE CONTEXT OF URBANIZATION IN KENYA

Urbanization in Kenya is not a recent phenomenon. Urban centers along the coastal region date back to the ninth century, when Swahili communities were involved in the Indian Ocean trade and established harbor towns (Ehret 2002, 248). The height of urbanization in pre-colonial Kenya was during the sixteenth century. After Kenya fell under British influence, many of the current urban centers were created as colonial towns, developing inside or close to pre-colonial towns. The colonial urban policy was against urbanization, restricting local Kenyans to live in the cities (UN-Habitat 2015a, 8). It also encouraged irregular urban development in Kenya, mostly because the colonial governance favored the central highland agricultural region, and further because the construction of the Kenya - Uganda railway encouraged urban developments forming along the railway corridor (9). After Kenya’s independence, the country

experienced a rapid increase in urban growth. The peak of the urbanization rate in Kenya was reached in the 1970s when the urbanization rate was 7.83% (UN-Habitat 2014, 148). The urban development followed the patterns established during the colonial period, and even today most urban centers are condensed in the central agriculturally fertile regions and along the railway line connecting Mombasa to Nairobi and following to Uganda (UN-Habitat 2015a, 9).

The estimation is that in the next decade the urban population of Kenya will increase by seven million people, in the next 30 years it will increase by 30 million people (UN-Habitat 2014, 147), and by 2050 the urban population will equal the rural population (UN-Habitat 2016a, 5). This projected urban population will be absorbed mostly by small and medium cities, and not mainly by Nairobi and Mombasa. The urban growth of Nairobi is currently slowing down (UN-Habitat 2015a, 9), as other towns outside the capital are on the rise. As examples, Kikuyu, Ruiru, Thika, and Machakos are medium size urban centers within 30 km radius from Nairobi currently experiencing increased growth (10). An essential characteristic of these emerging Kenyan towns is the overwhelming size of the peri-urban population, often more extensive than the inner town population (11).

CHALLENGES AND OPPORTUNITIES

Rapid urbanization experienced in Kenya in the 1970s brought along many challenges, foremost related to increase in urban informality, deficient physical infrastructure, poor accessibility to infrastructure, and lack of adequate urban planning policies.

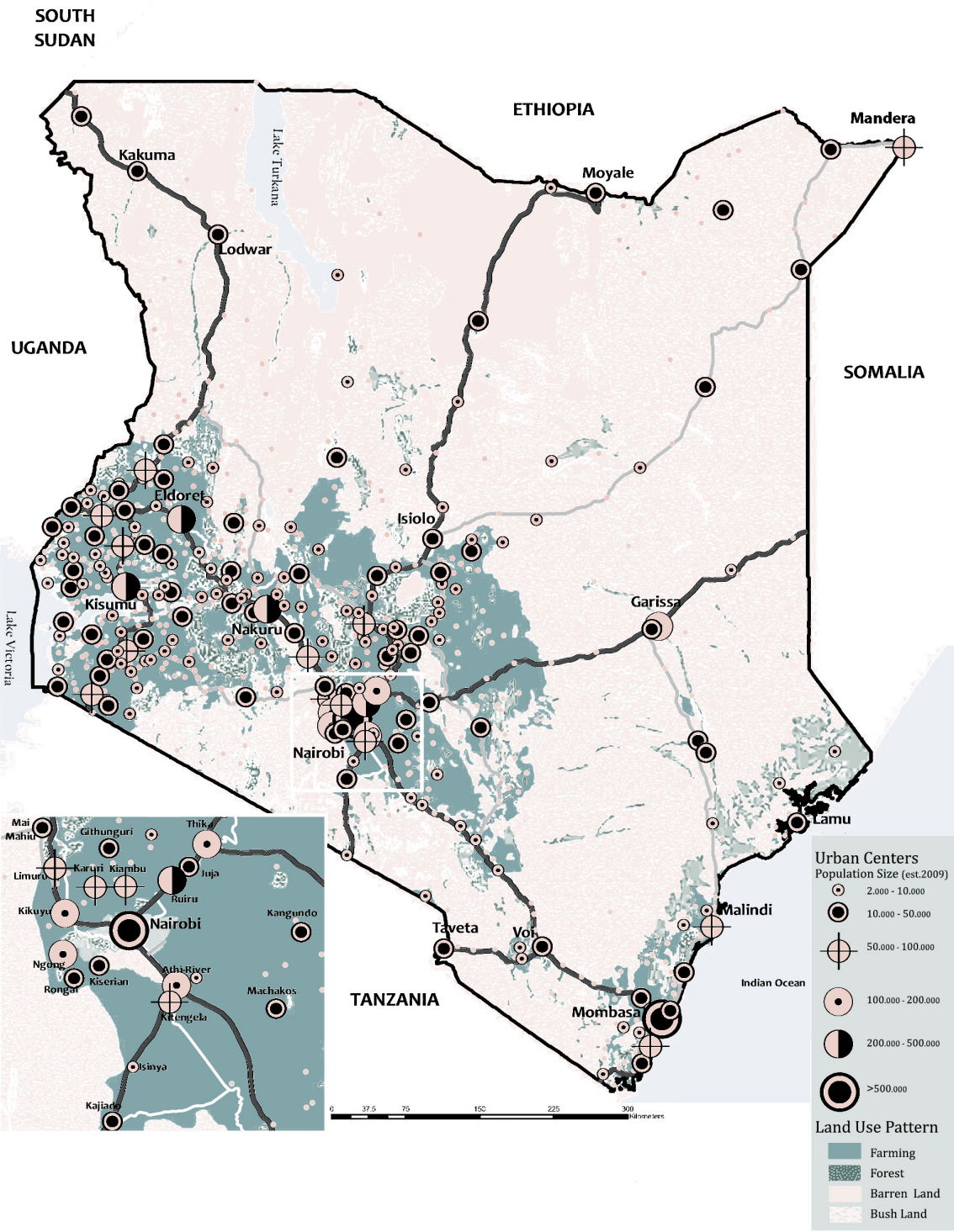
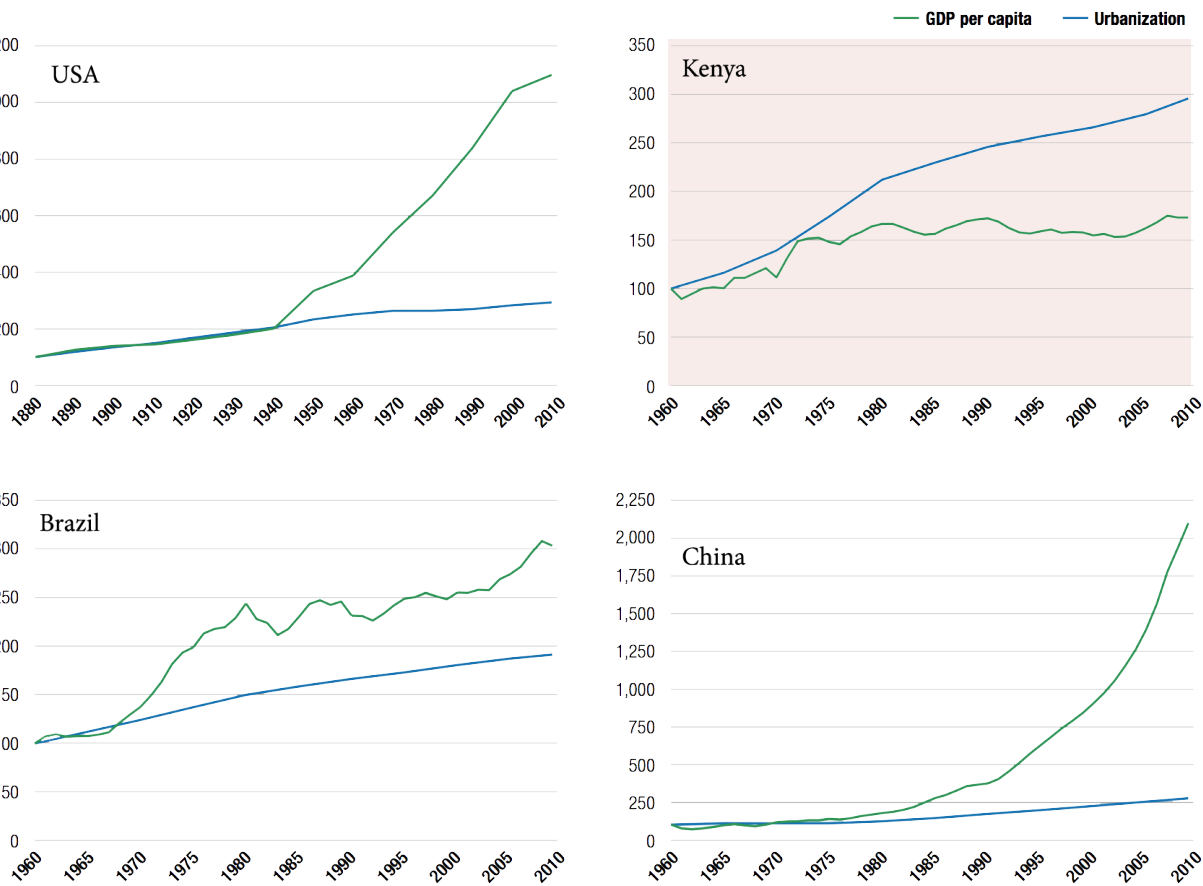


image 13. Distribution of Urban Areas in Kenya

Urbanization and GDP per capita in Selected Countries, 1960-2010



Note: Both time series are indexed to 100 in the initial year. The y value of each series shows the percentage change with respect to the base year. GDP per capita is in constant 2000 USD.

image 14. Relationship between Urbanization and Economic Growth (UN-Habitat 2012)

Some of the most critical current challenges faced by Kenyan urban centers are found inside informal settlements. Urban informality encompasses both a spatial pattern characterized by unplanned urban development, as well as a growing informal economy. Informal settlements are confronted with overcrowding, poor access to infrastructure, inadequate housing, and poor living conditions. Sometimes these areas are close to neighborhoods that offer the opposite living conditions, which only highlights the inequality gap. Furthermore, poor infrastructure across Kenyan urban centers continues to be a critical issue. In 2013, only one out of four urban households were connected to the main sewage and water supply lines (UN-Habitat 2015a, 12).

It is important to note that, although often urban growth is linked to increased productivity, in Kenya “the productivity growth [of urban centers] is negligible” (UN-Habitat 2015a, 13). Nevertheless, urbanization in Kenya is also fostering opportunities for economic growth. The current government is acknowledging the urban potential for productivity and tries to use urban density as an advantage towards addressing the infrastructure deficiency.

URBAN-RURAL LINKAGES

Another essential aspect of urbanization in Kenya is the strong connections that economic migrant urban households continue to have with rural communities (Un-Habitat 2016a, 5). Urban residents frequently have family members living in rural areas, which forms a level of security around their rural-urban migration in times of economic instability, and they often support rural economies or invest in rural activities (Republic of Kenya 2016, 5). This leads to an ongoing flow of money, resources, goods, and information

between the rural and urban communities. The urban food supply is especially susceptible to urban-rural linkages. An interesting example of urban-rural linkages is people of the Kisii tribe, originally from upcountry Kenya, migrating to touristic coastal towns and making a living out of selling soapstone carving merchandise. They often hold the monopoly over those items because they import the soapstone from the region they come from (Jamison 1999b, 957).

CURRENT DEVELOPMENTS

In the last decade, UN-Habitat has taken an active role to support and guide the Kenyan government navigating urban growth. The *2008 State of African Cities* report (UN-Habitat 2008) highlighted the rapid growth of urban population in East Africa and the shortcomings of urban governance in addressing urbanization. The *2010 State of African Cities* report (UN-Habitat 2010) further discussed the critical need for structured urban governance and planning policies in order to manage urban growth. Following the guidance of UN-Habitat, Kenya has made a considerable effort to address current urban challenges by investing in infrastructure and urban development planning in many emerging urban centers, in its pursuit to manage urban growth. The *Kenya Habitat Country Programme Document 2018-2021* (UN-Habitat 2018b) outlines the current programs promoting sustainable urban development in Kenya.

URBAN INFORMALITY
IN KENYA

“[Informal settlements] are a sensible, immediate response to the availability of resources, local conditions and cultural needs”
(Niskanen 2006, 31)

Rapid urbanization due to population growth and rural-urban economic migration, combined with lack of low-cost housing, poor urban planning regulations and general inefficiencies in addressing urbanization, leads to the formation and increase of informal settlements (UN-Habitat 2016d, v). Urban informality describes a pattern of development characterized by unplanned spatial development and informal economic development.

Informal settlements are dwellings that are not connected to clean water, lack sanitation equipment, are structurally unstable, do not offer adequate living space and living conditions, and/or lack land ownership security (UN-Habitat 2016d, 1). They are usually built on land that is occupied without tenure, protected, hazardous or unfit for development. Informal settlements do not meet building standards and regulations, and therefore they are constructed without authorization. Planning regulations are often unwilling to include informal settlements. As a result, informal dwellings are frequently not acknowledged on land use plans (v).

Affordable housing in Kenya’s urban centers is limited in comparison to the increasing demand to accommodate urban population (UN-Habitat 2016d, 14). Furthermore, most families that move to the cities from rural areas do not afford housing loans (14-15). Consequently, 56% of urban dwellers reside in informal settlements (11). Forms of urban housing informality in Kenya are often also found in areas formally allocated to housing development. In such situations, informality develops when houses are erected without a building permit because they do not follow building standards and regulations, the land is illegally subdivided, and homes are built on land allocated to recreational spaces and public use (13).

The main challenges faced by informal settlements are inadequate housing and living conditions (homes built with substandard materials; inadequate design; unstable constructions; overcrowding; lack of appropriate natural lighting or ventilation), inadequate access to infrastructure and essential services (water; sanitation; solid waste management; electricity; healthcare; early childcare education; recreation spaces), socioeconomic problems and general vulnerabilities related to safety and wellbeing (UN-Habitat 2016d, 19-20). In the coastal region of Kenya, informal settlements are often marked by land ownership ambiguity or unofficial understandings made between absent Arab landlords and residents who claim de facto

land rights (18). Insecurity of tenure hinders sustainable development or the effectiveness of upgrading interventions.

ADDRESSING URBAN
INFORMALITY

“... the conceptualizations of the informal settlement as both a residential and economic function and of the street as both a public space and an economic space have fundamental implications on the effectiveness of policy and planning interventions.”
(UN-Habitat 2016d, 17)

In Kenya, diverse approaches to addressing informal settlements have been tested, ranging from forced eviction, clearance, and relocation to temporary relocation, redevelopment and on-site upgrading (UN-Habitat 2016d, v). Until the late1990s, the main attitudes regarding informal settlements involved forced evictions, demolitions, and population displacement (Lines and Makau 2018, 410). The organic resistance response of slum dwellers fighting for the recognition of their homes was the Muungano wa Wanavijiji¹ social movement which started in 1996 (411) under the slogan “muungano nguvu yetu,” meaning “unity is strength.” In the early

1. Swahili, meaning “united slum dwellers.”

2000s, the approaches to addressing informal settlements started to shift from forced evictions to up-grading projects. In 2011, the *Kenya Informal Settlement Improvement Programme* (KISIP) was established, aiming at improving the standard of living in informal neighborhoods (UN-Habitat 2016d, 6).

The informal settlement intervention strategies combine “top-down” and “bottom-up” approaches and include on-site upgrading, resettlement, re-blocking, and redevelopment actions. Bottom-up approaches empower communities to be innovative and responsible for local development. Top-down approaches can have large-scale and long-term effects on informal settlement improvements (UN-Habitat 2016d, 34). Involving organizations and private investors in upgrading informal settlements is essential, because local governments often lack the necessary finances, given the considerably higher cost of developing infrastructure inside informal settlements (19). Nevertheless, the currently recommended approach to addressing urban informality in Kenya favors integrating slum upgrading projects into the official city planning (27), advocates for community participation (36), and stresses the importance of investing in slum-growth prevention strategies (34).

SLUM UPGRADING

The on-site upgrading approach aims at offering physical and socioeconomic enhancements to an informal settlement without relocating its dwellers (UN-Habitat 2016d, 39). Slum-upgrading actions include building or restoring infrastructure and community facilities, addressing environmental issues, improving housing conditions, addressing land ownership



image 15. Urban Fabric of an Informal Settlement in Malindi, Kenya

security, and developing social capital through facilitating access to education, healthcare, and training opportunities (35). An important part of upgrading projects is addressing the security of tenure issues because this motivates dwellers to invest in building infrastructure and improving housing conditions.

RE-BLOCKING AND REDEVELOPMENT

The re-blocking approach aims at improving the infrastructure of an informal settlement by re-arranging the housing units into a new layout which provides the necessary space for infrastructure distribution lines and access roads (UN-Habitat 2016d, 44). This practice is done in settlements where housing units are temporary structures and density permits re-arrangement. The redevelopment approach is more intrusive because it involves the demolition and rebuilding of existing housing units, it changes the physical appearance of the houses, and it requires temporary resettlement. The advantages of redevelopment are the possibility to create substantial change in the morphology of a settlement, to rebuild houses with more durable materials, and to develop structures that welcome higher densities (47). The disadvantage

of redevelopment is the temporary relocation process, which can be disruptive to a community’s economy if it is not managed sensibly.

RESETTLEMENT

The resettlement approach aims at relocating a community of informal dwellers to a new site that could offer sustainable long-term living conditions. Most resettlement projects are met with criticism because they disrupt the community’s economy, lifestyle, and social links (Un-habitat 2016d, 47). However, sometimes relocation is inevitable, such as in the case of informal settlements built on hazardous land.

Informal economic activities accentuate urban informality, not least to be mentioned being casual labor in the informal construction market, but also various activities regarding making, selling or servicing done without paying taxes (UN-Habitat 2016d, 15-16). Addressing urban informality must also account for informal economic activities, consider the formal economy - informal economy linkages, incorporate commercial spaces in urban design, and limit the disruption of economic networks.

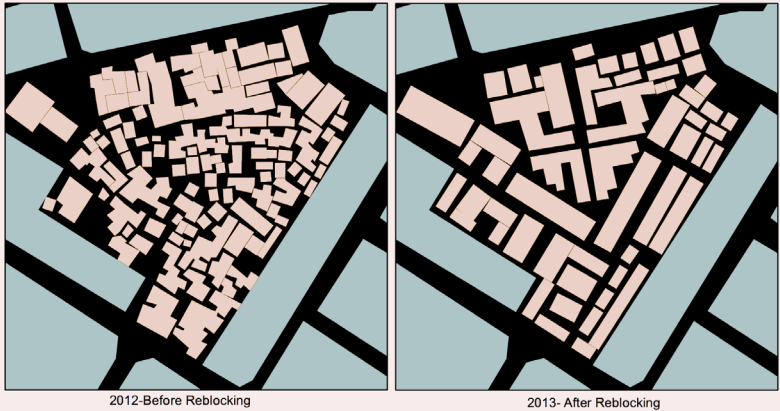


image 16. Before and After Re-Blocking Mtshini Mwau, Cape Town (UN-Habitat 2016d)

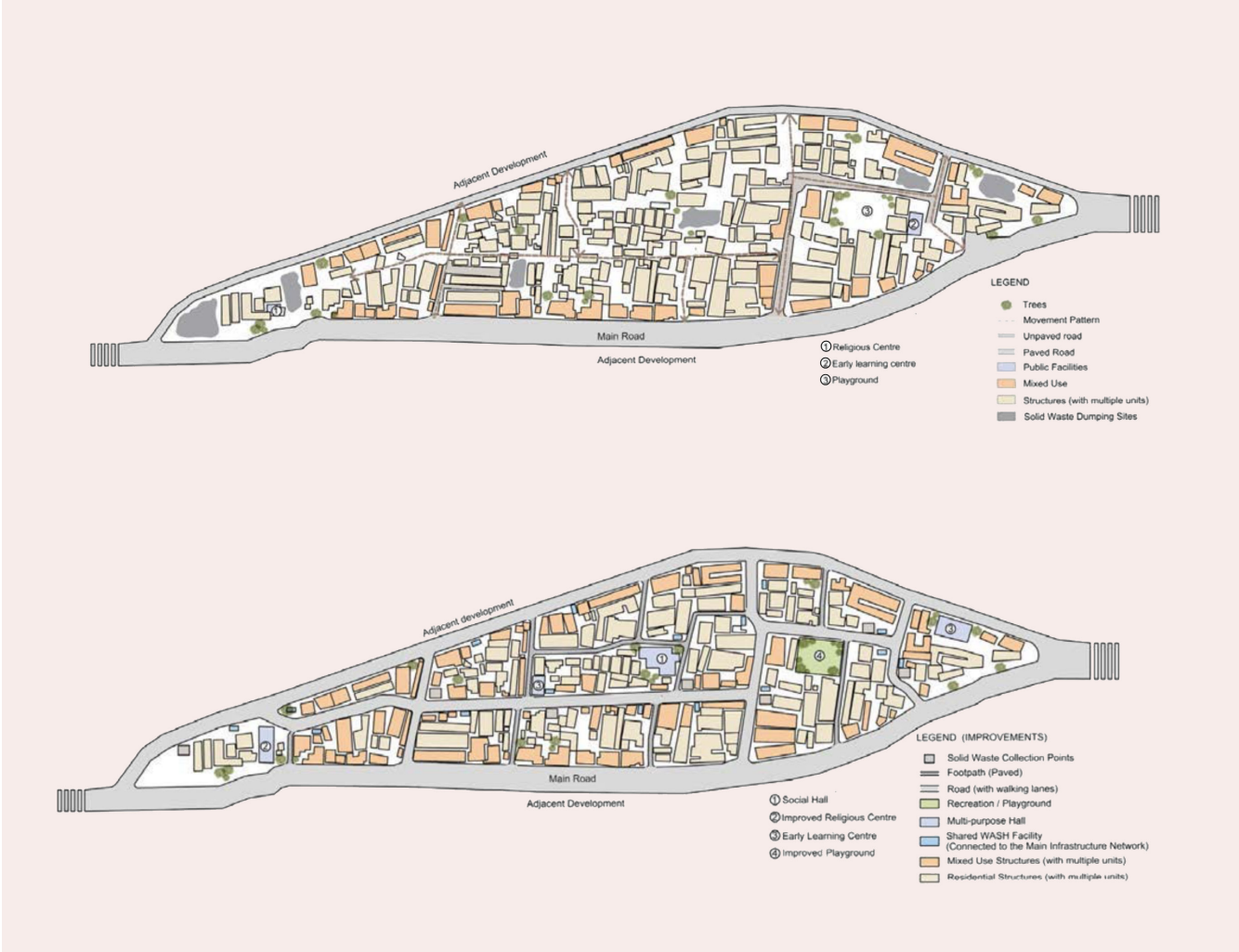


image 17. Before and After In-Situ Upgrading Illustration (UN-Habitat 2016d)

TOURISM DEVELOPMENT IN KENYA

“Tourism [in Kenya] is affected by political stability, perceptions of personal safety and security, and health.”
(Sindiga and Kanunah 1999, 26).

Kenya is one of the top travel destinations in Africa, alongside Morocco, Tunisia, South Africa, Tanzania, Seychelles, and Mauritius. Tourism in Kenya started in the 1950s, after the establishment of national parks which were created to preserve wildlife threatened by hunting during colonial times (Sindiga and Kanunah 1999, 28). The parks’ popularity with tourism was not anticipated, and facilities started to develop on a needs basis and without any formal planning (29). After Kenya’s independence, tourism experienced a massive and rapid increase. By 1980s, the majority of tourists came to Kenya with all-inclusive tours, bringing little revenue to the locals (Meyer 2013, 779; Sindiga and Kanunah 1999, 31). Similar to most African countries, tourism in Kenya developed without planning for a sustainable future.

Some countries in Africa perceived tourism as an instrument for wealthy Europeans to profit from local low-cost labor and therefore resisted getting involved with tourism. Kenya was not one of those countries, quite to the contrary, Kenya had “high strategic ambitions” for tourism development (Sindiga and Kanunah 1999, 26), being among the first countries in Africa to exploit tourism in the hope that it would generate socioeconomic advancement (Meyer 2013, 779). Consequently, today Kenya is one of the more established tourist destinations in East Africa. However, the considerable rise in touristic interest, complemented by the country’s enthusiasm to

take advantage of tourism opportunities (Dieke 1991, 277), created considerable problems for Kenya.

Firstly, tourism demands new developments and infrastructure in order to service the incoming visitors. Most touristic locations in Kenya, such as the national parks or the coast, did not have appropriate infrastructure: access roads, sewage systems, accommodation facilities (Sindiga and Kanunah 1999, 30). In the early years, infrastructure was built without planning, a process that soon proved to be unsustainable (29). Lack of comprehensive planning led to overcrowding national parks (creating environmental problems) (27), as well as developing social tensions by excluding the locals from accessing land and sea resources (32-33). Moreover, international tourists coming to Kenya with all-inclusive packages bring little money to the local economy. At the same time, they often expect a certain level of luxury, provided by facilities which are expensive to build and may require import of materials and goods.

Uncontrolled tourism growth also created environmental problems, exposing wildlife (Dieke 1991, 278), deteriorating the marine environment (Sindiga and Kanunah 1999, 26), degrading touristic locations due to overcrowding (27), and creating pollution from poorly managed waste (Obura 2001, 1272). In 1966, the Ministry of Tourism was formed to take charge of tourism-related policies, but its actions were often inefficient. Like many government initiatives in African countries, strategic planning was frequently accomplished merely by listing desired results (Sindiga and Kanunah 1999, 26-31). Consequently, in the early years, tourism development planning in Kenya was rarely providing long term vision and pragmatic action plans.



image 18. Curio Shops on the Beach in Malindi, 2016 (own image)

Until the 1970s, tourism in Kenya operated without comprehensive planning (Sindiga and Kanunah 1999, 27). Despite realizing that the country’s economic gain from tourism was limited and that massive tourism was damaging the environment which was leading to decrease in touristic interest, the Kenyan government continued to advance tourism without justification (31). By the end of the 20th century, tourism in Kenya was in decline, becoming “uncompetitive and . . . ultimately unsustainable” (25).

However, tourism also provided an increase in job offers and employment opportunities (30). Today, tourism development in Kenya is perceived essential to economic growth, and tourism promotion campaigns receive government funds (Saner, Yiu and Filadoro 2015, 4). However, even though Kenya is a renowned travel destination in

East Africa, its tourism product is narrow and not reaching its full potential. Promotion campaigns are focusing on the west European market, and the economic returns are often influenced by inner politic conflicts (UNECA 2011, 58-59).

Nevertheless, tourism is the largest foreign exchange earner for Kenya (followed by coffee and tea) (Jamison 1999a, 17; Schoorl and Visser 1991, 18), and accounts for a significant part of the country’s gross domestic product (Kitsao 2010, 2). Kenya’s Indian Ocean coastline is a valuable resource to the country’s tourism, covering 536km in length. Even though Kenya’s main touristic attraction is the Maasai Mara National Reserve, the coast welcomes about 60% of the country’s tourists (Hoorweg, Foeken and Obudho 2000, 399). The majority of international visitors come to Kenya for beach holidays and wildlife watching.



image 19-20. Malindi Public Beach, 2016 (own images)

TOURISM IN THE KENYAN COAST

“The adventure of the Kenyan coast is unfortunately matched by overdevelopment in the form of full-service Swahili-chic resorts and a sleazy haze of sex tourism.”
Adam Karlin, Lonely Planet.

The Kenyan coast started to develop as a beach tourist destination in the 1950s. Already a couple of decades earlier, beaches attracted European colonialists residing upcountry, who were able to travel by train to Mombasa on the Kenya-Uganda railway, and carried on exploring the coast (Sindiga and Kanunah 1999, 30). International tourists arrived at the coast after Kenya’s independence. Unlike East Asian or Caribbean beach holiday destinations, the Kenyan coast was a favored location not only for the beauty of palm-fringed sandy beaches with clear blue waters and coral reefs, but also for the convenience of proximate wildlife reserves and safari opportunities (Dieke 1991, 275). After charter flights to Mombasa were initiated in the late 1960s (Sindiga 1996b, 427), the coast experienced a massive increase in tourism, with about 500 hotels being built within a decade (Sindiga and Kanunah 1999, 30; Meyer 2013, 779). Unlike vast game reserves that are most favored by U.S. tourists, the coast is most visited by west European tourists (Dieke 1991, 276).

The Kenyan coast offers palm-fringed sandy beaches with clear blue waters and coral reefs and hosts six Marine National Reserves. There are four popular holiday areas on the coast: Diani Beach in the south, Mombasa, Malindi/Watamu and Lamu archipelago in the north. Between Malindi and Watamu lies the Malindi-Watamu Marine National Park, with some of the most beautiful

coral reefs in the coast of Africa. The Kenyan Coast is the home of an estimated 70 monuments and sites of historical and architectural importance (Schoorl and Visser 1991, 14). They include ruin sites of houses, mosques, tombs, towns or fortified towns; monuments and urban areas of architectural wealth, all sites of historical importance that talk about the different cultures that shared the region (14-15). The beauty of “sea, sun, and sand” mixed with the rich historical background of the region is the leading recipe for attracting tourists to the Kenyan Coast.

In the 1970s, when the Kenyan government started to be more mindful of the impact of tourism, most development and regulation policies were directed towards national parks. For the coast, there were no policies to restrict foreign investment, nor to encourage local participation in hotel owning (Meyer 2013, 779). As a result, most hotels built along the coast of Kenya are owned by foreigners. Moreover, the top hotel management positions are also generally held by foreigners. Luxury hotels, in particular, prefer to work with highly educated and skilled personnel, which is not easy to find along the coast (Sindiga and Kanunah 1999). Furthermore, the few Kenyans who own or manage hotels there are usually not local Swahili population (Sindiga 2000, 9). This means that the local population is receiving only limited economic benefits from tourism.

Another factor to observe is that, during the massive tourism expansion, there were also no planning regulations for the Kenyan coast. This led to uncontrolled hotel development, which took over the most attractive areas closest to the ocean, limiting the locals’ access to the beach (Dieke 1991, 277; Sindiga and Hanunah 1999, 26; 33). The locals use the beach for recreation and gathering resources (fishing, harvesting

seaweed), but hotels built close to the beach limit their activities at the shore. Moreover, in areas where hotel proprieties are developed side by side in a strip, open access to the beach is scarce. Naturally, this created animosity between the local culture and the tourism industry, leading to socio-cultural problems. Furthermore, hotel developments did not account for the accommodation needs of incoming workers, the impact developments continuously have on the environment, the sustainability of the local communities, nor the conservation of the local culture (Dieke 1991, 277; Sindiga and Kanunah 1999, 26; 33).

Although coastal tourism development benefits from beautiful landscapes, an abundance of historical sites, low-cost labor, and ample supply

of land, its economic potential is not fully used (Saner, Yiu and Filadoro 2015, 4). Moreover, tourism in Kenya is continuously influenced by political stability and international news about local conflicts. In more recent years, the coast, particularly in the north close to the Somalian border, but also affecting the southern regions, has frequently experienced violence and political instability (Obura 2001,1272). Furthermore, Kenya's southern neighbor, Tanzania, is an advantaged competitor offering similar beautiful beaches, without the threat of significant political turmoil. Therefore, there is a growing recognition for the need to expand the touristic product as well as to explore alternatives to the current trend of mass international tourism, such as domestic tourism, conference tourism, ecotourism (Sindiga 1996a; Sindiga 1999).



image 21. Informal Fishermen Village Close to Malindi Beach, 2016 (own image)

DOMESTIC TOURISM IN KENYA

“The ownership of tourism enterprises is dominated by Europeans.”
(Sindiga 1996b, 428).

To compensate for the times of political instability that draw away the tourists, as well as the low season months, the Kenyan government started to endorse domestic tourism already from the end of the 1980s (Sindiga and Kanunah 1999, 34). Domestic tourism was promoted by encouraging Kenyans to benefit from the country's investment in tourism development, to discover their country, and to support tourism employment during low tourism season (Sindiga 1996b, 20-21).

Domestic tourism promotion in Kenya is mostly done by providing incentives for Kenyans to travel, such as discounted pricing for accommodation, travel costs, and park entrance fees, that apply only to Kenyan citizens (Sindiga 1996b, 22,24). It should be noted that, in the case of travel, it is mainly the national railway company, Kenya Railways Corporation, which can offer the best promotion rates. However, the railway tracks cover only a limited part of the country, essentially the line from Mombasa to Nairobi and stretching further towards Uganda. Even with these considerations, tourism costs remain considerably high for most Kenyans.

Tourism is not an essential part of the Kenyan lifestyle, generally on behalf of low average incomes. More than 70% of Kenyans live in the countryside. Most rural population works in the agriculture sector, and spends their income on direct household expenses, providing food and basic needs for their families (Sindiga 1996b, 23). In 2018, only 27% of Kenyans lived in urban

areas (CIA 2019). Urban Kenyan households have higher incomes, with more revenue left after covering housing costs and expenses. However, urban families also spend more on expenses, invest in the education of their children, and opt for private health care (Sindiga 1996b, 23). Moreover, Kenyans most often spend their holidays visiting family and friends and sharing their home, so they do not always seek accommodation when traveling (Dieke 1991, 285).

Domestic tourism has been most effective in the case of organized group tours, where package deals can be offered to large parties, such as school group trips, religious retreats, camps, company meetings, conferences, or workshops (Sindiga 1999b, 24). This strategy for promoting domestic tourism would be more efficient if the touristic product would be more diverse and mindful of the local's needs (26). However, the structure of Kenya's tourism continues to be strongly orientated towards accommodating international tourism which brings higher returns (29). Domestic tourism is worth pursuing, not only because it helps with employment in the tourism industry during the low seasons, but it can also encourage Kenyans to be more active in discovering their country, with its diverse nature and rich ethnic cultures and values (Sindiga 1999b, 26; Dieke 1991, 286).

KENYA'S TOURISM SECTOR SWOT ANALYSIS



image 22. SWOT Analysis of Kenya's Tourism Sector (UNECA 2011)

3. TOURISM DEVELOPMENT IN MALINDI

MALINDI HISTORY

“The history of Kenya coast can be traced back 2000 years - through fragments of texts, the logs of ancient marines and the maps of flat-earth geographers - to the Romans and the Greeks.”
(Amin and Willetts 1986, 9)

Malindi is a small town situated on the Kenyan coast, 115km north of Mombasa. It has a rich history involving old Islamic and Arabic cultural influences, and was once a prominent city of the Swahili civilization due to its importance as a trade center (Jamison 1999a, 9; 18). Throughout history, Malindi welcomed various foreign settlers: Arabs, Portuguese, Germans, and British.

During the thirteen century, the Kenyan coast became the home of Muslim immigrants, and port towns started to develop. The merchants of the port towns were prosperous, exporting slaves, ivory, and gold. At the beginning of the fifteenth century, the king of Malindi was establishing trading ties with the Ming Emperor of China (Amin and Willetts 1986, 16).

In 1498 Portuguese explorer Vasco da Gama reached Malindi, now a prosperous town with a population of 6000. Receiving a warm welcome from the Shiek of Malindi, Vasco da Gama

established a trade agreement between Portugal and Malindi. Also at the end of the fifteenth century, a community of Indian immigrants started to prosper in Malindi by trading “rhino horn, tortoise shell, ivory, cowrie shells, gum copal, and ambergris” and importing cotton textile, copper and china ceramics (Amin and Willetts 1986, 17). Furthermore, at that time, the lands around Malindi were agriculturally fertile, particularly known for their plantations of citrus fruit and coconut.

In 1593 the Portuguese moved their base to Mombasa. Two centuries later, Malindi was in economic decline, and after persistent attacks by the Galla nomads from the north, it was eventually abandoned. In 1861, Sultan Majid of Zanzibar rejuvenated the town, establishing it as a slave trade center (Amin and Willetts 1986, 29). In 1895 Malindi became part of the East Africa Protectorate (1895-1920), and the British administration gradually abolished slavery. Without the slave workforce, Malindi landowners were no longer efficient at cultivating their fields (Waaijenberg 1993a, 13) which led to a decline in agricultural production. Plantations were left deserted, and the once fertile agricultural lands became barren.

In 1903 Malindi was officially granted the status of “town” by the British administration, making

the urban center more attractive to freed slaves, who lived alongside the Arab and Muslim communities (Amin and Willetts 1986, 97). In the 1930s, the tourism industry started to develop in Malindi when Europeans bought land along the coast and established the first hotels. Malindi's recent history is marked by tourism expansion and unplanned rapid development.

EVOLUTION OF TOURIST
ACTIVITY IN MALINDI

“Malindi has high potential for future tourism growth due to its scenic beauty, clean sandy beaches, historical sites and monuments, and [a] good marine national park.”
(Kitsao 2010, 4)

In the 1920s, Malindi was an unplanned recreational spot for local British colonialists who were attracted by its sandy beaches and deep-sea fishing opportunities. Because there were no local accommodation options, those pioneer adventurers rested in tents raised on the beach (Jamison 1999b, 950; Sindiga and Kanunah 1999, 30). In *The Beauty of the Kenya Coast*, their frequently quoted book, Amin and Willetts (1986) described how the development of tourism in Malindi started with a boutique “hotel” built in 1931 as a response to the perceived need to accommodate visitors interested in big game fishing in the region. One of the most notable first adventurers was Ernst Hemingway who visited Malindi in 1934 staying at the, now famous, *Blue Marlin* hotel (Amin and Willetts 1986, 100). Although at this time Malindi was still primarily used for winter breaks by colonial owners of inland plantations (Jamison 1999a, 9), within the following three decades it gradually

transformed into becoming a holiday destination targeted by European tours. A notable impact in this transition was the development of *Lawford’s* hotel in 1935, combining local architectural features with Victorian British decor (Amin and Willetts 1986, 100). Soon colonialists established private holiday homes in Malindi, and after the Second World War the town became their favored retirement destination (Sindiga and Kanunah 1999, 30).

After Kenya’s independence in 1962, Europeans also started booking holiday tours to Malindi. Although it was German investors who developed the first hotels, the town became increasingly attractive in the 1980s when Italian travel operators actively advertised the location as a pristine, idyllic beach destination (Sindiga and Kanunah 1999, 30; Jamison 1999a, 9; Jamison 1999b, 950). It was also at this time that the local government began planning for future development and improving the infrastructure of the town (Sindiga and Kanunah 1999, 30). At the end of the twentieth century, “roughly half the working population [was] directly involved in accommodating, entertaining and otherwise taking care of a mainstream of European tourism to the Kenya coast” (Amin and Willetts 1986, 97). Moreover, tourists coming to Malindi were looking for longer, relaxation-oriented holidays, and the emerging hotel developments aimed at providing full resort experiences.

Hotel bookings in Malindi are constantly affected by the political environment of nearby regions. For instance, in the aftermath of the Gulf War in the summer of 1991, tourists from Europe and America avoided visiting the region (Jamison 1999a, 17). Furthermore, in August 1997, violence erupted on Kenya’s coast, leading to over a dozen deaths, many more injuries, the destruction of homes, and the burning of



image 23. Private Beach in Malindi, 2016 (own image)

around 300 stalls in the Malindi tourist market. The background of this political violence was the “increasing multiethnicity created by tourism” (Jamison 1999a, 18) as well as increased immigration from upcountry (Human Rights Watch 2002). Following the events, the coastal tourism trade came to a impasse, and Kenya quickly experienced a sharp downturn in tourism (Jamison 1999a, 18). Along the Kenya coast, hotels experienced a less than ten percent

occupancy rate the following years (Obura 2001, 1272). In Malindi, this resulted in 14 hotels being forced to close temporarily, leaving many workers unemployed or on unpaid leave (Kibicho 2005, 261). The spring of 2008 and 2012 were again seasons with low bookings on the Kenyan coast due to international reports about local conflicts. (Meyer 2013, 780). Violence and political instabilities are indirect forces that affect tourism bookings in Malindi.

TOURISM DEVELOPMENT
IN RELATION TO LANDSCAPE
AND URBAN PLANNING

“There was neither government control nor regulation. A ribbon-type spatial structure of hotels emerged along the coastline. The government had to respond to provide infrastructure after the investment decisions had been made without the advantage of a plan.”
(Sindiga and Kanunah 1999, 35)

Before the 1990s, international coastal tourism developed without sustainable planning, government control and regulation, or consent by host communities (Sindiga and Kanunah 1999). The focus was on increasing foreign exchange earnings and economic growth. In Malindi, the lack of comprehensive tourism planning slowly led to the degradation of the marine environment, pollution, deterioration of social-economic conditions and resentment from the local communities who were denied access to the beach (Sudi 2013, 1102; Obura 2001, 1272).

Moreover, until 2016, Malindi had no urban or regional planning regulations. Without restrictions, hotel developments took over the most attractive areas close to the waterfront, claiming a considerable portion of the beach as private (Dieke 1991, 277; Sindiga and Kanunah 1999, 33). In some places along the shore, tourism development is so dense that locals are being denied proper access to the water (Schoorl and Visser 1991, 46; Sindiga and Kanunah 1999, 26). Most lands close to the shore are now owned

by foreigners, predominantly Italians, who took advantage of the town’s lack of planning policies (Kitsao 2010, 22). Foreign developments use areas near the beach and the ocean, which feature the most beautiful landscape and therefore, are the most valued land. In order to develop those areas, massive devegetation has taken place, a process that has influenced beach erosion (Schoorl and Visser 1991, 46).

Rapid tourism growth also required large supporting workforce, and Malindi was not prepared to accommodate the quick increase of economic migration in a sustainable way. Neither did the tourism developments account for the workers’ accommodation needs. As a result, Malindi developed informal settlements and started to experience traffic complications. Furthermore, the lack of land-use planning led to poor urban planning decisions: mixing commercial and industrial areas (Kitsao 2010, 27), building entertainment facilities around residential areas creating noise pollution (Schoorl and Visser 1991, 54), and allowing unethical developments, such as the disco built in close proximity to a mosque (Sindiga 1996b, 429). This kind of unregulated development deteriorates the urban fabric and enhances local resentment.

The tourism industry in Malindi was soon in decline. Partially this was due to external factors, such as political instability or competitiveness of neighboring regions; but mostly it was the lack of planning for tourism development, up-keeping the local infrastructure or anticipating environmental and socio-cultural problems (Sindiga and Kanunah 1999, 27). Tourism

development in Kenya is closely linked to overall national development in a country that faces many challenges (Dieke 1991, 273).

At the beginning of the 1990s, the need for sustainable long-term development was starting to be recognized and promoted (Schoorl and Visser 1991, 3). In April 1991, a workshop on Sustainable Coastal Tourism was organized, and possible solutions and strategies for sustainable

development were discussed (4). The concept of ecotourism was introduced as a responsible alternative way of developing the tourism industry, which is mindful of the environment, preserving the biosphere, and protecting local culture and values. The main ideas behind ecotourism are ecologic sustainability, resource conservation, and responsibility for supporting the host communities (Sindiga 1999, 111).



image 24. Dreams of Africa Hotel. image 25. Private Beach Access in Malindi (own images)



image 26-27. Sheella Village in Malindi, 2016 (own image)

SOCIOECONOMIC IMPACTS OF TOURISM IN MALINDI

“An extreme economic dependence of the local community on tourism can put major stress upon this industry as well as the people involved to perform well.”
(Saner, Yiu and Filadoro 2015, 12)

Tourism development in Kenya can exert a strong socioeconomic impact on local communities. In his paper on contemporary tourism, Jovicic (2011) explains how the effect of tourism can be seen through “changes presented in value systems, individual behavior, structure and relationships within the family, collective way of life, level of security, moral norms, traditional rituals and customs, the organization of human communities and the like” (599). In Malindi, the socioeconomic impact is perhaps most visible in changes in work and consumption behavior. Although historically focused on trade, agriculture, and fishing, after the 1980s rapid tourism development, Malindi’s economy shifted towards relying on the service and hospitality industry.

Currently, the local economy of Malindi has become overdependent on tourism. In 1991, Schoorl and Visser estimated that approximately 90% of Malindi’s residents were either employed in the tourism industry or contributed indirectly towards sustaining it, describing Malindi as a strong “magnet” that was attracting influx of people looking for economic gain due to of its diverse formal and informal work opportunities (Schoorl and Visser 1991, 23). Of course, this percentage cannot be verified, given that “in Kenya, around 61% of the non-agricultural urban work is informal” (UN-Habitat 2016d, 15)¹. Nevertheless, after the rapid growth of tourism in the 1980s, allured by the promising economic opportunities, the local community

quickly shifted its mindset towards investing in welcoming and servicing tourists.

According to Kibicho’s research, in 2000 Malindi residents were considerably pleased with the effects of tourism development. The local community agreed the town was now more prosperous, offering better living conditions and employment opportunities. Locals perceived that the increase in tourism was generating more economic stability. They were also pleased that Malindi was making a good international impression, which helped them become more recognized also on a national level. This was all due to the rapid tourism growth Malindi was experiencing in the early years. However, tourism development can also be disruptive to local economies. It creates animosity among locals as the community faces high inflation rates and certain resources become available only to foreign investors (Sudi 2013, 1112). Moreover, because tourism in Malindi is seasonal, during the slow season the decrease in personal income is widely noticed by the locals.

Although Malindi residents believe that tourism brings economic wellbeing, the actual financial gain for the local Swahili community is limited, one of the reasons being that the vast majority of hotels and tourism-related businesses are owned by foreigners (Meyer 2013; Sindiga 1996b). The majority of tourists come with all-inclusive packages paid in full abroad and spend their stay inside resorts without substantial interaction with the locals (Hoorweg, Foeken and Obudho 2000, 399; Sudi 2013, 1112). Moreover, less than 30% of middle management positions in hotels along the Kenyan coast are occupied by the Swahili population (Meyer 2013, 785).

1. “According to national employment statistics, the informal economy’s share of total jobs was 70% in 2000, rising to about 83% in 2014” (Un-Habitat 2016d, 15).

Top tourism jobs are taken by more educated workers from upcountry or abroad. According to Holloway (1998), as cited by Kibicho (2000), an influx of workers assuming jobs in the tourism industry occurs when the locals choose not to participate or lack the necessary competencies (118). In Malindi, education deficiency is a reality, and locals struggle to secure positions in hotel management. At the same time, the town's Swahili population refrains from working in the hotel industry or from investing in owning guesthouses for tourists (Sindiga 1996b, 428). In his study of the socio-cultural impact of tourism in Malindi, Kibicho (2000) describes how the Islamic background of Malindi's Swahili population influences them to avoid tourism-related jobs. The Swahili population of Malindi is strongly devoted to following Islamic religious principals and values. Because those values often collide with tourism-related activities, "the local Muslims perceive tourism as a source of evil" (Kibicho 2000, 119). Furthermore, service jobs related to the tourism industry, such as hotel

maids, waiters, or boat drivers, are associated with the tasks slaves used to assist the Swahili population with. Therefore, they consider agreeing to such jobs a disgrace (Sindiga 1996b, 428). Nevertheless, the Swahili are connected to the tourism industry indirectly by holding a monopoly over local transport and managing local restaurants in the central business district (Jamison 1999, 952).

However pleased with the impact of tourism on the local economy, Malindi residents also commented on the negative effects it carried on the local society. Tourism growth was perceived as responsible for an increase in drug abuse, "alcoholism, prostitution and sexual permissiveness, gambling/illegal games, organized crimes, individual crimes, and general morality," not only by the Swahili population but also by Kenyans (Kibicho 2000, 112). Cultural contact between tourists and a local community has can potentially encourage open-mindedness, acceptance, responsiveness, national pride

leading to conservation of cultural values, progression, and innovation. Unfortunately, in Malindi's case, cultural exchange between the youth and the foreign tourists contaminated the community's values.

religion and culture, and the history of living in urban coastal towns (Jamison 1999b, 952). In Kenya, the Swahili population is an extremely small minority (less than one percent), and even in Malindi and Mombasa, the historic Swahili towns, they are no longer a majority (Jamison 1993, 98).

The economy of the Swahili community used to focus on international trade across the Indian Ocean by dhow, but today international trade is no longer driving their economy (Jamison 1993, 110). Swahili generally refrain from participating in the tourism industry because they are not comfortable with the increase of tourism in Malindi or the influx of upcountry Kenyans. However, they still benefit indirectly from tourism.

Residents of the Shella neighborhood, the oldest "village" in Malindi situated next to Malindi Beach, are predominantly fishermen. They sell their fish to hotels, restaurants, and locals (Jamison 1993, 111). Most bus companies in Malindi are owned by Swahili (Jamison 1999b, 952), and they often work as bus drivers. Hotels and tour companies usually employ Swahili men as bus drives. Swahili often own small shops and restaurants in the business district of the town, close to the bus stations. Some Swahili men own tour companies or work as tour guides, and few even own local guesthouses. Swahili women often marry young, discontinuing their education. They work mostly from home, manufacturing and selling, or trading products with other women (Jamison 1993, 111). Swahili women who pursue education seek jobs as teachers, nurses or clerks (112). Although the community elders are uncomfortable with this, some young Swahili men work as beach boys, are involved in illicit money exchange and even drug dealing (Jamison 1999b, 953).

ETHNIC DIVERSITY IN MALINDI

"These migrations have met with some resistance and resentment on the part of the indigenous ethnic populations of the coast, who see the presence of noncoastal Kenyans and non-Kenyan outsiders as disruptive to local traditions and as exploiting natural and economic resources." (Jamison 1999a, 10).

Malindi is characterized by considerable ethnic diversity, which is the result of economic migration of different Kenyan ethnic groups from other parts of the country moving to Malindi in search for employment opportunities (Jamison 1999a, 10). Malindi residents now include original Swahili and Mijikenda people; upcountry Kikuyu, Kamba, Kisii, Luhya, Luo, Maasai, and Samburu ethnic groups; Indians and Arabs born in Kenya; and expatriate Europeans (Jamison 1999b, 951). Middle-class Swahili dominate the central areas of Malindi, predominantly the Shella and Barani neighborhoods. Giriama communities are concentrated in low-income areas such as Muyeye neighborhood.

THE LOCAL SWAHILI COMMUNITIES

The original inhabitants of Malindi are the Swahili people. Although some Swahili have Arab and Oman roots while others are of coastal African Bantu descent, the Swahili civilization revolves around the Swahili language, the Islamic



image 28. Mawni Informal Settlement in Malindi, 2016 (own image)

THE LOCAL MIJIKENDA
COMMUNITIES

The Mijikenda are a group of nine tribes of Bantu people living in the Kenyan Coast backcountry (Waaijenbergh 1993b, 23). Most of them are farmers, growing crops and keeping cattle and goats; and they frequently trade with the Swahili. The Mijikenda people in Malindi are mostly part of the Giriama tribe (Jamison 1999a, 10) and live in houses in the outskirts of the town where they cultivate the land. They are now locals in Malindi. Their economy and lifestyle still focus on agriculture, selling produce in the local market or along the roads, ideally to tourists (Jamison 1993, 117). The Mijikenda communities are described as lacking initiative to profit from the tourism business and “being content with life in their small villages” (Jamison 1999a, 11).

The level of education among Mijikenda is considerably low. Apart from working the land, they also often hold unskilled jobs in Malindi, such as domestic workers for wealthy Swahili families, cleaners and groundkeepers for hotels, waiters, construction workers, service workers in Swahili shops (Jamison 1993, 118). Some work as traditional dances for tourist hotels (119). Some Mijikenda young men also work as beach boys and unofficial tour guides, often introducing tourists to the Giriama villages (Jamison 1999b, 953).

UPCOUNTRY KIKUYU, KAMBA AND
KISII ETHNIC GROUPS

Kikuyu are the biggest ethnic group in Kenya holding a strong influence over government and politics in the country (Jamison 1993, 124). Many are entrepreneurs and often business oriented, and many are also successful in upcountry agriculture. They were attracted to Malindi by

its economic opportunities (Jamison 1999a, 11). Having the advantage to be higher educated than the locals, and some even having previous work experience in Nairobi, they are successful at obtaining office jobs in the hotel industry as well as in the government (Jamison 1993, 130-131). They also own business servicing both locals and tourists, or they retail produce from Giriama farmers (130). They are known to be good “hawkers,” therefore young Kikuyu people are frequently hired to sell souvenirs in the curio shops (Jamison 1999b, 957).

Among the upcountry Kenyans now living in Malindi, the Kamba people form the biggest community (Jamison 1999a, 11). Their culture and language closely resemble the Kikuyu culture (Jamison 1999b, 952). They moved to Malindi already before the tourism industry was peaking, involved in trade between Swahili and upcountry Kenyans (Jamison 1993, 135). Kamba people are most known for their souvenir wood carvings. In Malindi they own many of the curio shops. However, they also hold service jobs in hotels and restaurants, work as teachers, own shops and bars, and are generally known for being motivated and reliable (136).

The Kisii community dominates the soapstone carving merchandise in the curio shops. They also own many souvenir shops (Jamison 1999b, 957)

UPCOUNTRY LUO ETHNIC GROUP

The Luo are a non-Bantu ethnic group with an established reputation of being well educated, some even holding advanced degrees from Western universities (Jamison 1993, 143). They moved to Malindi intensively during the 1970s and 1980s, taking office jobs in hotel businesses.



image 29-30. Ladies Selling Food in Maweni Village, Malindi 2016 (own image)



image 31. Narrow Streets Inside SeaBreeze Informal Settlement, Malindi 2016 (own image)

TOURISM IMPACT ON CULTURE AND VALUES

Tourism impacts the local culture and value systems in Malindi. Kamba and Kisii people are known for their art and traditional craftsmanship. In Malindi, tourism increase has helped them preserve their artisanal skills, through raising demand for handicrafts. However, it has also influenced them to divert from designing objects of traditional craftsmanship into creating souvenirs and crafts that meet the demand of tourists (Kibicho 2000, 120).

The effects of tourism are also seen as diminishing the “community cohesion,” because they enhance competition and rivalry through entrepreneurship (Kibicho 2000, 113). In the past, traditional Malindi communities valued collaboration, and family members mutually participated with economic support. Nowadays, as the town’s youth becomes more interested in

financial autonomy, traditional economic family structures are being challenged.

Tourists’ frequent display of liberal behavior constantly clashes with the cultural values of the Swahili people, inevitably creating resentment (Sindiga 1996b, 429). Elders are particularly offended by the Western culture, which they associate with revealing dress code, public display of affection, alcohol consumption and promiscuity, and also affects the local youth. In their effort to protect their cultural identity, the Swahili population of Malindi has tried to stop tourism development. However, because their community is only a minority in the country, and lacks political power, their efforts have been unsuccessful (428-429). In their 2008 research, Wamwara and Cornwell conclude that Malindi residents tolerate misbehavior (including prostitution), as a consequence of tourism (Wamwara-Mbugua and Cornwell 2008, 106).

Wamwara and Cornwell (2008) also observed that most locals stopped using the beach as a relaxation space (106). The beach became a place of unaccepted behavior or a commercial space at best. As an extension of what Belk and Costa describe as “cultural imperialism,” when beaches are claimed by private hotels that deny access to locals, it is often local authorities that support the tourist establishments exercising such power (Belk and Costa 1995, 40).

PROSTITUTION

*“‘Tourism is Prostitution’ . . .
poor countries, as tourist destinations
‘sell themselves’
to the rich, tourist-generating countries
in order to earn a living.”
(Kibicho 2005, 258)*

Although Malindi is not identified as a sex tourism destination (like Thailand or the Philippines are today), it is undeniable that tourism affects the town’s increasing sex trade (Kibicho 2005, 275). In times of economic prosperity, Malindi attracts population from upcountry Kenya who comes to seek employment in the tourism industry. When employment is insecure, women are enticed by the informal economy and find it easy to participate part-time as commercial sex workers because it offers better pay and requires no level of education (Kibicho 2005, 259). The main motivations behind entering prostitution are to earn money, as well as the hope to achieve a better way of life.

Prostitution in Malindi is also becoming increasingly attractive to young men, who give up education to spend their days as “*musyoki*,” beach boys. They display themselves as holiday

companions, offering to serve as informal guides, connecting tourists with local culture and experiences in exchange for meals, expenses, tips, and gifts (Jamison 1999a, 15). However, when they are requested, most young men accept to perform sexual services. Italian hotels frequently hire beach boys to be available as tour guides for their guests (Jamison 1999b, 953).

Although in African countries sex has been a sensitive subject to discuss or to research, in 2002 an extensive study on the sex trade and its relationship to the tourism industry of coastal Kenya has been conducted (Kibicho 2005). This study reveals that the main reason for females being introduced to the sex trade in Malindi is unemployment, followed by broken family relationships (Kibicho 2005, 265-266). Because abortion is illegal in Kenya, and pregnancies outside marriage are highly disapproved, young girls who get pregnant without being married are often no longer welcomed in their parental homes and find themselves in desperate need of finances.

Furthermore, the study also observes how, although prostitution in Malindi existed long before tourism, there is a close relationship between the growth of the tourism industry and the sex trade (Kibicho 2005, 275). Tourist areas are most attractive to sex workers because Western clients provide higher earnings, as well as more diverse opportunities¹ (268-269). It is often the sex workers that approach tourists with their offers, thus increasing the demand.

1. Tourist clients offer Malindi sex workers more opportunities than local clients, such as the hope for an alternative future with the help of finding a western spouse (which is the most desirable outcome), or more financial stability through finding long-term clients (Kibicho 2005, 267; 269; Jamison 1999b, 961).

However, the vast majority of female sex workers in Malindi would prefer to find different jobs (Kibicho 2004, 195; Kibicho 2005, 266). Because the main factor that promotes prostitution in Malindi is economic, it would be more efficient to attempt to overcome sex trade by developing economic or educational programs which could provide alternative forms of participation in the tourism industry (276).

TOURISM IMPACT ON
EDUCATION IN MALINDI

The level of education among locals in Malindi is remarkably low, below other parts of the country. The educational marginalization of the coastal region has long been a struggle in Kenya, and it is mostly related to the Muslim population refusing to participate in Western education (Eisemon 2000). Most Swahili children are sent to Muslim primary and secondary schools, and their results in national examinations are poor (Sindiga 1996b, 430). Because the level of education in Malindi is low and the educational facilities are deficient, the town is not attracting the most competitive teachers, which further perpetuates the education problem.

To make matters worse, tourism growth in Malindi further impacted education by providing opportunities for children to drop off school, tempted by jobs in the informal sector of the tourism industry. School attendance rates in Malindi are low (Hoorweg, Foeken and Obudho 2000, 403). Young men most especially find it easy to spend their days as beach boys instead of attending school (Jamison 1999a, 15). Families turn a blind eye on their children entering prostitution when they need extra income for the family (Kantai 2014a). Young mothers

especially are in need of better education, which would improve child care and raise awareness for children's benefits from education (Hoorweg, Foeken and Obudho 2000, 401). Moreover, the limited number of students who finish secondary education do not have the financial means to pursue further education which would enable them to apply for better jobs in the tourism industry (Kibicho 2000, 119).

Education has become a major concern in Malindi, which now hosts a generation of young adults who grew up with education deficiencies. Because the tourism business is in decline and employment rates are low, young adults are in a particularly vulnerable situation. They lack the skills to start and manage businesses or to efficiently invest the money they have (Kantai 2014b).

TOURISM IMPACT ON
CONSUMPTION IN MALINDI

The tourism industry has a substantial impact on the cost of products and services in Malindi. Prices here are generally higher than in other towns, even compared to Nairobi or Mombasa (Wamwara and Cornwell 2008, 103). During high tourist seasons, some products become so expensive in Malindi that many locals can not afford them. As an example, demand for coconut palm tree leaves used for thatching rooftops, called makuti, increases during the low tourist season when hotels are renovating (Kibicho 2000, 119). This not only raises the price of makuti to as high as ten times its regular price which makes it unattainable to the locals (who also use the material for their houses), but also affects the coconut production (Schoorl and Visser 1991, 50).



image 32. Impact of Tourism on Consumption in Malindi (Wamwara and Cornwell 2008)



image 33-34. A Space for Foreigners, a Space for Locals, Malindi 2016 (own images)

Moreover, certain foods become exponentially expensive during the high season when foreigners pay a higher price for them¹. On the other hand, during the low season, some commodities are no longer imported, their scarcity generating a higher price (Wamwara and Cornwell 2008, 103). Another interesting effect on pricing is the existence of dual pricing. Tourists are usually overcharged for goods and services, even when they bargain (Wamwara and Cornwell 2008, 104; Jamison 1999a, 12).

Apart from high prices, locals also experience limited entertainment options. Entertainment is predominantly designed to answer to the demand of Western consumers who solicit primitive and exotic experiences (Wamwara and Cornwell 2008, 103,13). Moreover, many public beaches have now been converted into private beaches and are open only to hotel guests. More drastic scenarios where locals are discriminated are the new concept of hotel clubs, which are only open to club members (Wamwara-Mbugua and Cornwell 2008, 106).

LAND OWNERSHIP IN MALINDI

“Whoever had planted trees retained the right to use the land they stood on, . . . became less inclined to move and in due time considered the land they cultivated and where they had their trees, houses and graves as their own.”
(Waaijenber 1993a, 14).

Land ownership is a complex situation in Malindi. Before the British administration, the Kenyan Coast was mostly populated by Arab, Swahili

1. Seafood is an excellent example because it would be very affordable along the coast. Consequently, locals can no longer enjoy them.

and Mijikenda people. Mijikenda lived in the outskirts of towns, making a living mostly from agriculture, or from trade between the Swahili population and the inland tribes (Hoorweg 2000, 312). They worked on Swahili plantations, some even as slaves. With the installment of the British administration at the end of the nineteenth century, slavery was gradually abolished, and the Arab or Swahili landowners were no longer able to cultivate their lands efficiently (Waaijenber 1993a, 13). Their plantations were left deserted, and with time they accepted Mijikenda farmers and former slaves to live as squatters on their land.

Ultimately, the Arab owners left, still keeping their ownership titles. Mijikenda squatters planted crops on Arab and Swahili lands because new laws gave them the right to harvest the crops they planted (Waaijenber 1993a, 19). The planted crops were their propriety. Because coconut palms were becoming especially valuable, and palm trees were long-term crops, the Mijikenda settled permanently on the land. This led them to consider the land their own because, according to their tradition, land rights transferred to the ones who cultivated it (Hoorweg 200, 313).

In 1963 Kenya gained independence, and the government began to purchase back land owned by European settlers inland but failed to acquire back land owned by Arabs on the coast. The Arab owners later sold land to Europeans who built residential homes and developed the tourism industry, evicting the squatters without compensation (Kitsao 2010, 22; Hoorweg 2000, 313). The government tried to regulate the land with several settlement schemes, some even welcoming inland farmers who were more efficient than the Mijikenda farmers because they implemented modern agriculture techniques (Waaijenber 1993a, 20-22).

Land ownership in Malindi remains uncertain in many parts of the town, and the population that lives as squatters knows that they do not have land security. Therefore, they are reluctant to invest in taking care of agricultural soil or building sustainable housing.

TOURISM IMPACT ON
HOUSING DEVELOPMENT IN
MALINDI

“For the Government of Kenya and other developing countries, housing is, for various reasons, still considered somewhat of a residual factor.”
(Kitsao 2010, 3).

The influx of job seekers in Malindi has led to a rapid population growth that is not being systematically addressed with increased housing. The growth in youth population in Malindi is especially noticeable, and it is due partially to Kenya’s increasing population growth rate, and partially to economic migration of young jobseekers (Kitsao 2010). In 2000, tourism-related jobs were highly sought after in Kenya. Malindi was experiencing up to 20% in-migration from upcountry people seeking employment in the tourism industry. The new emerging tourism developments required a large supporting workforce but did not provide accommodation for the workers. According to Kitsao’s study (2010), the 2002-2008 Malindi District Development Plan reviewed the housing problems but did not propose any action plans (Kitsao 2010, 3). It is common for Kenyan authorities to direct funds towards industries that would directly influence the economy, with the reasoning that, by becoming more economically

independent, the local population will have the finances necessary to invest in housing (4). As a result of inadequate housing and unclear land ownership, Malindi developed informal settlements. Houses are built by families who do not own the rights to the land they occupy (Kitsao 2010, 22). In extreme cases, such as the fisherman village that developed between the Muslim cemetery and the beach, the people live in dwellings made out of a structure of branches filled with palm leaves or mud, and built on sand. Half the houses in Malindi classify as informal dwellings (UN-Habitat 2016a, 11). There are seven officially recorded informal settlements in Malindi: Kisumu Ndogo, Majengo, Alaskina, Dongo Kundu, Barani, Maweni and New Stage (KCG 2013, ES-10)¹. Without land ownership, locals cannot make any investments on the land they use. In cases where land ownership has been unclear, communities occupying the land were removed to make the land available for tourism development (Schoorl and Visser 1991, 7).

The lack of housing and planning policy has also led to segregated developments of high-income residential holiday homes (Kitsao 2010, 4). These areas are concentrated in the southern part of Malindi, along the Casuarina road. Outside the holiday season, these home are mostly empty.

1. An unofficial inventory by the Muungano Support Trust in partnership with Muungano wa Wanaviji (Kenya Federation of Slum Dwellers) counted 20 informal settlements in Malindi. During her 2016 trip to Malindi, the author visited Maweni, listed in the official Kilifi county documents, SeaBreeze, recorded by the Muungano Support Trust, and a clandestine Mijikenda fishermen village hidden between the curio market, the cemetery and the beach. In the fishermen village, most dwellings were made out of a structure of branches filled with palm leaves. Few dwellings had walls filled with mud. The Mijikenda fishermen village is still visible in the 2019 Google Earth rendering.



image 35. Dwelling Part of the Mijikenda Fishermen Village in Malindi, 2016 (own image)

CURRENT SITUATION IN MALINDI

“With economic meltdown in Italy coupled with Kenya’s shrinking tourism fortunes leading to high rates of unemployment, a once burgeoning coastline town is on the verge of becoming a ghost town.”
(Jolie Lanji, Nairobi Business Monthly, 2016)

In 2012, Rasna Warah reported for Daily Nation that an offer from Italian authorities had been made to finance a street lighting project in an area near the Vasco da Gama pillar should Malindi invest in turning the area into a promenade. The offer was refused, and still as of spring 2019, there is no lighting in the evening along the shoreline. The waterfront of Malindi is deserted in the evenings (Warah 2012).

In July 2014 armed men part of Somalia-based Islamist group Al-Shabaab conducted a series of political based attacks in Lamu, a city 140 km north of Malindi (Harper 2014; Gettleman 2014). These kinds of militant attacks by Al-Shabaab in Kenya started in 2011 when Kenya sent armed forces into neighboring Somalia following the death of a UK national and kidnapping of his wife (Harper 2014; Gettleman 2014). As a result of this turmoil, tourists no longer perceive the Kenyan coast as being safe, and international travel advisors frequently mention the security situation. The hotel businesses in Malindi were genuinely affected by the attacks in Lamu, experiencing massive cancellations. Many hotels had to close the following winter due to low bookings. Business also declined for entertainment centers, artifact shops, and stores.

In 2015, despite continuous marketing efforts by Kenya Tourism Board, low bookings persisted. Italy was still fighting economic depression, and



image 36. Closed Curio Shops at Malindi Tourist Market in March 2016. (own image)

Italians who owned residential properties along Casuarina road sold or rented their villas at low rates. This aggravated the situation for hotel investors, who tried to sell their proprieties, but with little success. Many hotels were closed due to low bookings, including the famous Coral Key, Blue Key and Lawfords Beach Club hotels (Lanji 2016). The locals described Malindi as “mji mauti,” a dead town (Lanji 2016). Around the same time, coastal Tanzania was receiving international recognition as a great travel destination, attracting hotel investments (Saner, Yiu and Filadoro 2015, 5).

In spring 2016, most vacation homes owned by Italians along Casuarina road were on sale or uninhabited. Roberto Macri, who has been a resident in Malindi for many decades, explained

the situation Malindi was facing in 2016:

Initially the crisis facing the real estate industry and tourism sector in Malindi was solely blamed on security, but security is no longer a problem and yet Malindi still is dead. The government needs to research, re-evaluate the new policies being put in place to boost tourism to ensure they are relevant to the current situation on the ground because there are greater looming problems. (Lanji 2016)

In January 2017, the US State Department reported 122 people in Kenya being killed in 2016 due to terrorist attacks and issued a travel warning regarding Kenya’s Coast (Kelley 2017).

In March 2017, *Construction Review Online* reported that the transport and housing parliament committee granted Malindi Airport a

budget of \$146 million to invest into expanding the runway and bringing the airport to global standards (Kiganda 2017). The new runway is designed to receive long distance international flights.

In October 2017, Malindi faced three weeks of water shortage and an outbreak of waterborne diseases (Daily Nation 2017).

In spring 2018, following international marketing campaigns, Watamu town experienced an increase in tourism leading to 80 percent hotel occupancy (Ringa 2018). Watamu is located 20 km south of Malindi, and it is Malindi’s direct competitor. Trying to rejuvenate Malindi tourism, “[tourism] players in Kilifi County are working on strategies that will help attract more domestic



image 37. Color of the Indian Ocean at Malindi Beach in March 2016 (own image)

and international tourists” (Lwanga 2018). The newer strategies for reviving Malindi tourism are expanding the Malindi airport, connecting Malindi to Tsavo East National Park through the Malindi-Sala Gate Road, and exploring the potential of domestic and conference tourism (Lwanga 2018).

In April 2019, the UK government continues to advise “against all but essential travel” to the northern coast of Kenya, and informs of terrorist attack risks in coastal areas, including also Malindi (UK Gov 2019), the international terminal of the Malindi airport is not yet open, and the international tourism industry continues to be in decline.

REFLECTION

After the mid-1960s, tourism development in Malindi expanded rapidly and unsustainably, without accounting for the socioeconomic, cultural, and environmental development of the town. Examining the evolution of tourism in Malindi, we can observe a close resemblance to the Butler tourism life cycle model (Butler 1980).

The exploration stage took place before the early 1930s, when Malindi was an unplanned recreational location for adventurous British colonialists who pitched tents on the beach, attracted by the area’s unspoiled scenery and cultural richness. They interacted with the local community without creating a socioeconomic impact. In the early 1930s, the local colonialists

BUTLER MODEL	MALINDI
1. <i>EXPLORATION</i>	before the 1930s
2. <i>INVOLVEMENT</i>	the early 1930s - late 1960s
3. <i>DEVELOPMENT</i>	1970s - mid-1980s
4. <i>CONSOLIDATION</i>	the late 1980s
5. <i>STAGNATION</i>	the early 1990s

image 38. Malindi Tourism Development in Relation to the Butler Model Life Cycle

started to respond to visitors by developing the first hotels. The involvement stage began at this point, lasting until the late 1960s. During these years, more facilities were built, advertisement started to take place, and Malindi gradually transformed into becoming a holiday destination targeted by European tours. After the mid-1960s, marked by Kenya’s independence, German and Italian investors started to develop hotels along the beach. In the early 1970s, Malindi entered the development stage. Tourism development accelerated, Malindi becoming increasingly attractive in the 1980s. In the late 1980s, a considerable segment of the local economy was dependent on tourism and at the same time, the residents’ attitudes towards tourism started to shift from approval to opposition. The elders of the local Swahili community made unsuccessful efforts to stop tourism development.

In the late 1980s, Malindi entered the stagnation stage, as the peak number of tourists had already been reached. Social, economic, and environmental problems started to be signaled by academic literature. The Butler model portrays a longer stagnation stage, and the expectation would have been for Malindi to slowly shift from consolidation to decline, experiencing a longer stagnation stage. Unfortunately, in 1991 Malindi

was caught in the aftermath of the Gulf War. The Gulf War ended in February, but the following summer tourists from Europe and America avoided visiting the East African Coast. Malindi experienced an abrupt decline in tourism that year, followed by continuous stagnation and more waves of decline triggered by political unrest in the region in 1997, 2008, and later in 2012. The locals notice the current decline in tourism and the media talks about Malindi as being “on life support” (Lanji 2016).

According to Butler (Butler 1980), all is not lost. A tourist destination can also experience the rejuvenation stage if it is willing to undertake a radical shift in touristic strategy. A positive aspect of the decline stage is that local residents might be able to buy back land as the tourism industry declines. Nevertheless, eventually even rejuvenated locations experience decline. Malindi must not delay diversifying its economy. The following chapters explore Malindi’s current strategy towards rejuvenating the economy while rehabilitating the tourism sector and propose an advantageous method of exploring different future scenarios to help Malindi build a strong vision for the future.

4. CURRENT SITUATION

5. URBAN PLANNING

The previous section identified the lack of urban planning regulations as one of the foremost challenges Malindi has been facing. This part further analyzes the current situation of Malindi town and reveals recent efforts made by the local government at establishing urban planning regulations. It further discusses the limitations of the current urban development plan and exposes untapped local resource potential for economic development.

PART TWO ANALYSIS

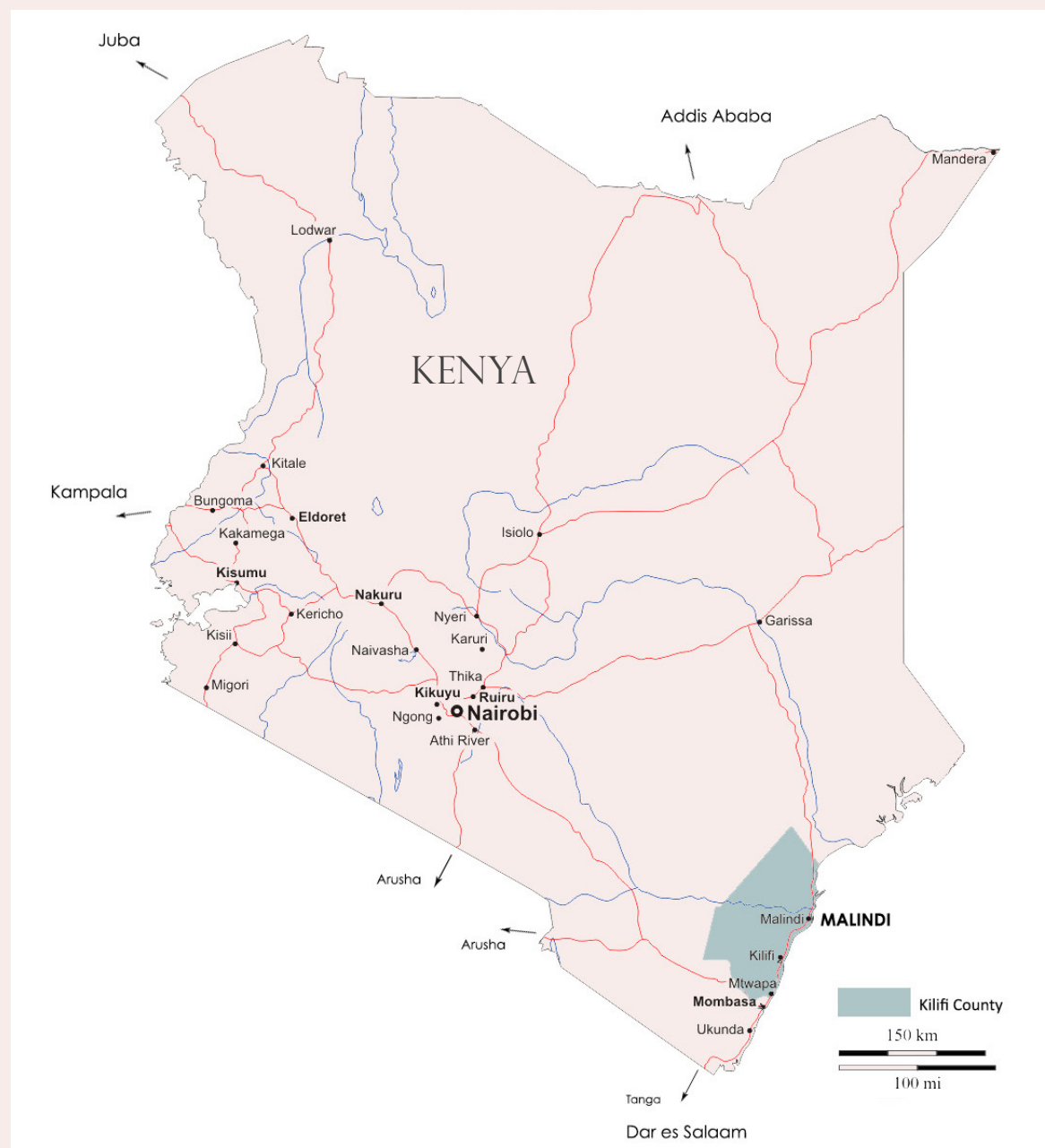


image 39. Kilifi County and Malindi Town: Road Connectivity within Kenya

FACTS AND FIGURES OF MALINDI

MALINDI MUNICIPAL POPULATION:

207,253 (2009): 41% core urban area, 16% peri-urban area, and 43% rural area

MALINDI TOWN POPULATION:

84,150 (2009)

AVERAGE HOUSEHOLD SIZE:

5.04

DISTANCE FROM MOMBASA:

116 km

DISTANCE FROM NAIROBI:

566 km by road

SATELLITE TOWNS:

Watamu, Gede, Ganda, Kakuyuni, Madiguiuni, Mijimboni, Msabaha, Kavunyalalo, Mamburui.

ECONOMY:

highly dependent on tourism; transport, trade and commerce, agriculture, construction; informal economy.

UNEMPLOYMENT RATE:

48%; 75% among the youth.

INFRASTRUCTURE:

most of the roads are unpaved; water and sewage services are scarce and unreliable; low electricity connection coverage; less than half the population has access to garbage collection services;

AIRPORT:

Malindi Airport.

AIRPORT CONNECTIONS WITH:

Currently 5 airlines fly to Malindi: Airkenya Express, Fly 540, Fly-SAX, Jambojet, Mombasa Air Safari. Lamu, Nairobi, Lamu and Mombasa. Currently undergoing expansion work to be able to receive international flights.

image 40. Facts and Figures of Malindi (UN-Habitat 2016a; KCG 2015)

4. SOCIO SPATIAL DESCRIPTION

“Malindi is an interesting mix between a historic Swahili town and a modern holiday center.”
(City image of strategy, ISUDP 2015)

MALINDI SOCIO SPATIAL CONDITION

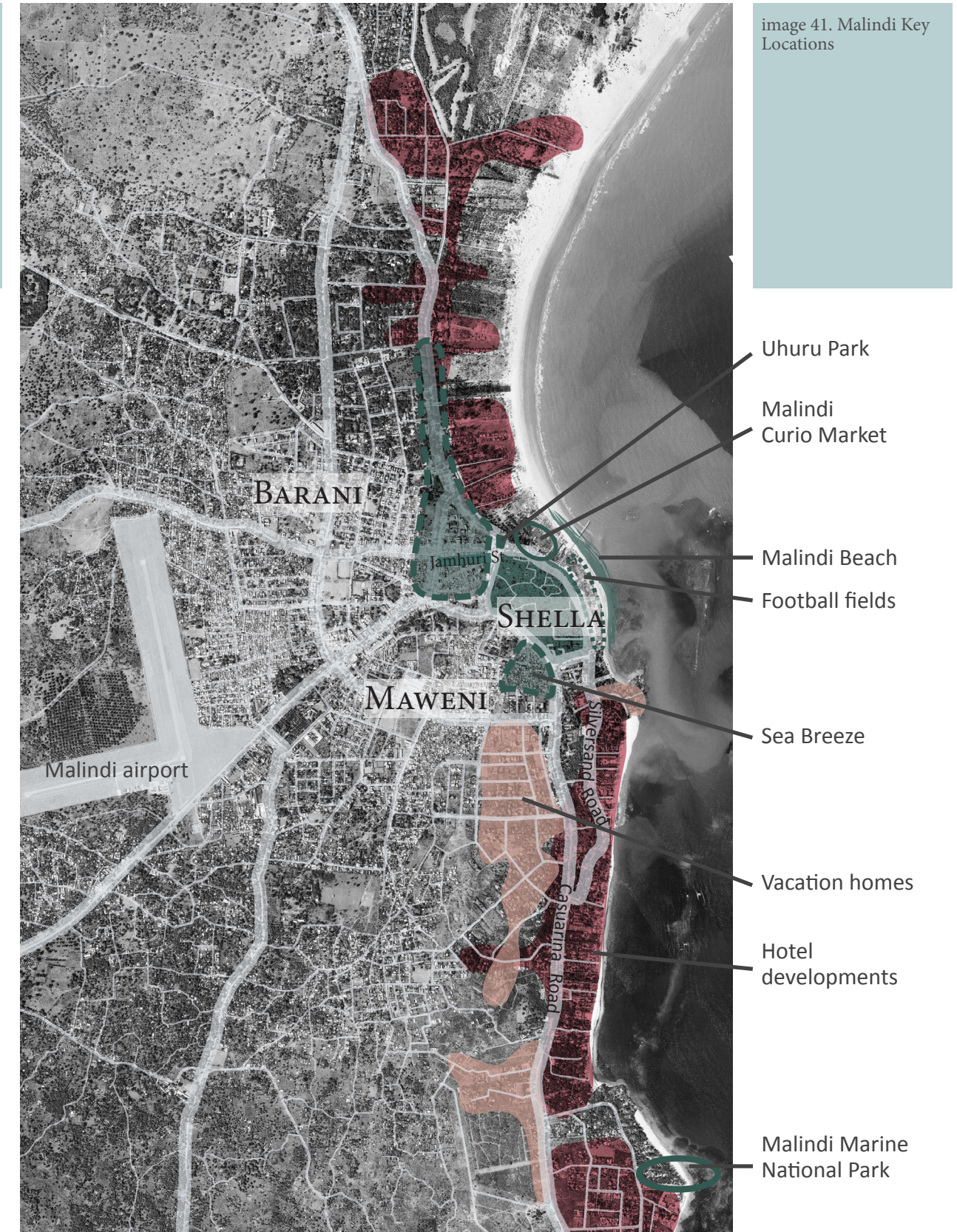
Malindi is the most prominent urban center of Kilifi County, situated on the Kenya coast, 115km north of Mombasa. The town stretches from the estuary of the Galana - Sabaki river in the north, to the Malindi Marine National Park in the south, covering an area of approximately 50km². Malindi Municipality stretches further south and west, incorporating several satellite towns, the Mida Creek and the Arabuko Sokoke Forest.

Malindi town developed around the Shella village¹, the oldest part of town which now hosts a majority of Muslim Swahili population (Jamison 1993). East of the Shella neighborhood, crossing the Silversand Road, is the Malindi Curio Market, the public Malindi beach hidden behind a layer of untamed vegetation, a neglected fish shop at the start of the long Malindi pier, and a sequence of football fields stretching along the beach. North of Shella is Uhuru Park, a small corner garden left in the middle of three intersecting roads. This spot is the historical and cultural center of the town, the place where the British colonial office was built, and the beginning of the commercial district of Malindi.

1. Locals refer to the different neighborhoods as “villages”. In Swahili, they use the word “mitaa”, which means “local”.

West of Uhuru Park is the Barani neighborhood, the leading business center of the town which developed along the Jamhuri Street. Southwest from Shella is the Maweni neighborhood and the overcrowded Sea Breeze informal settlement. The residential part of Malindi stretches radially towards the west, and the town’s urban character gradually dissolves into farmhouses and rural areas.

Malindi is connected by road with Mombasa and Lamu, and features an airport receiving direct flights from Nairobi, Lamu and Mombasa. The airport is currently expanding to welcome international flights. No train lines are passing through Malindi. The town hosts over 80 hotel developments, mostly distributed along the coast.



TOPOGEOGRAPHICAL FEATURES

Malindi municipal region is a grassland area with stunted vegetation. It features four topographic zones: Coastal Plains, Forest Plateau, Coastal Range, and Nyika Plateau; to which correspond four agro-ecological zones (Kilifi County Government 2015, 2.5). Malindi district features agro-ecological areas best suitable for coconut, cassava, cashew, and millet (Foeken 2000, 35). Most of Malindi’s agriculture focuses on corn, cassava, cashew, coconut, coffee, cotton, sugar cane, and vegetables (Schoorl and Visser 1991, 6).

CLIMATE

The climate is monsoonal, with hot and humid conditions around the year and two rainy seasons. The cold season June-August has temperatures drop to an average minimum of 21.5°C. The temperatures in the hot season January-April raise up to an average maximum of 32.1°C. The average rainfall is 900-1000mm/year (Kitsao 2010, 19). The long rains take place during April - May (Schoorl and Visser 1991, 6), and at this

time many of the hotels are closed due to low bookings (Kibicho 2005, 261).

POPULATION PROJECTION

Malindi municipality counted 207,253 people in 2009. The population projection for the municipal region is estimated to grow to a maximum of about 775,000 people by 2035 (KCG 2015, 2.17), or only approximately 410,000 people in a slow growth rate scenario (2.19).

Malindi town, the core urban area of Malindi municipality, is formed of three sub-locations: Shella, the central historic district; Barani, in the west and northwest side; and Kijiwetanga in the southwest side (KCG 2015, 2.11). Malindi town hosts approximately 40% of the Malindi municipality population. In 2009, the core town population was 84,150 people. The core town population is estimated to reach a maximum of 235,000 people by 2035 (2.14). Even in a low growth scenario, the estimations are that the urban area will double in population (2.15).

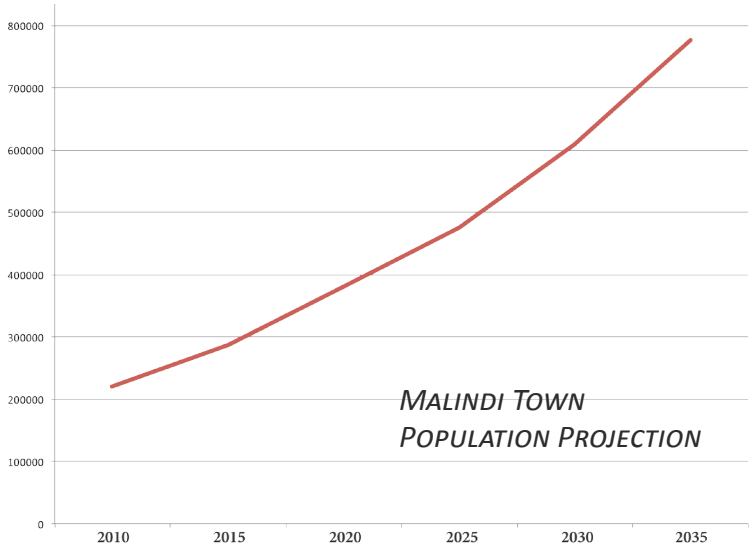


image 42 Malindi Population Projection (KCG 2015)

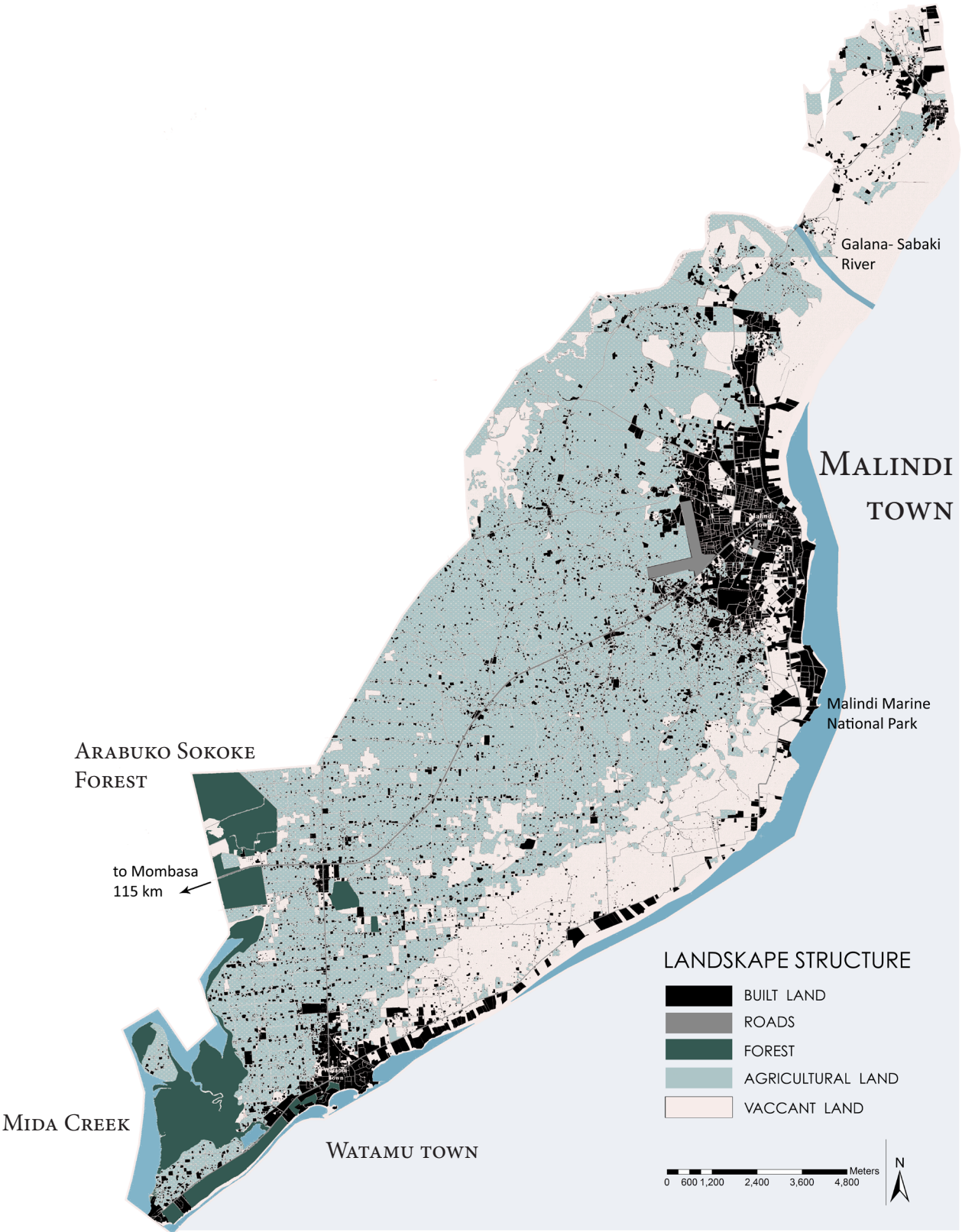


image 43. Malindi Municipality - Landscape Structure

LAND USE

Malindi municipality is 677 km², but 23.76% of the planning area is water mass and wetland (KCG 2015, 2.25). 48% of the dry land is used for agriculture; close to 40% makes up undeveloped land, forest and mangrove conservation areas, and the riparian reserve; and only 6% of the dry land is residential area.

Malindi town covers an area of 50.91 km², out of which 9.5% is water mass (KCG 2015, 2.29). 45% of the land is allocated to agriculture, but one-third of it is undeveloped. 22% of the land is used for residential purposes, and 4.8% is commercial use.

URBAN GROWTH

Malindi town is the largest urban center in Kilifi county. The town extends linearly along the coast but also features radial developments stretching westward along the main roads (UN-Habitat 2016a, 11). The organic linear development is more accelerated in the southern side of the town, which is popular with hotels and holiday homes following the coastline. In the north, the Galana-Sabaki river conservation area represents a natural barrier to the development of the town (KCG 2015, 3.3). The central business district, the old Shella “village” (a predominantly Swahili neighborhood inside Shella sub-location), and the informal east Maweni village form the high-density core of the town.

ECONOMY

Historically, Malindi economy relied on fishing, agriculture (crop production and livestock), and trade. Today, the economy shifted towards service industries and trade. According to a 2015 Kilifi county government report, the main economic

activities in Malindi are transport (53.9%), followed by wholesale and retail business (24.6%), agriculture (8.2%), construction, and tourism (KCG 2015, 5.3). However, these numbers only represent formal employment.

No official statistics accounting for Malindi’s informal economy exists. A 2016 national report estimates that “76,5% of Kenya’s labor force works in the informal sector” (Republic of Kenya 2016, 25). A significant portion of the Kilifi county population “engage in subsistence family farming and low-productivity self-employment” (KCG 2018,19). In Malindi, tourism-related jobs account for a large portion of the informal economy. The economic growth rate is low, and the unemployment rate is 48%. Among the youth, the unemployment rate is 75% (KCG 2015, 5.3). As a result, a large portion of the town population relies on the informal economy.

The agriculture economy features crop farming (citrus fruit, coconut palms, mango and cashew trees, millet, rice, sugar cane, and greenhouse vegetables), fishing and animal farming (KCG 2015, 5.6). Although the area has known potential for agriculture, this economic sector is underdeveloped. Most produce is consumed locally (5.5).

MALINDI TOWN LAND USE

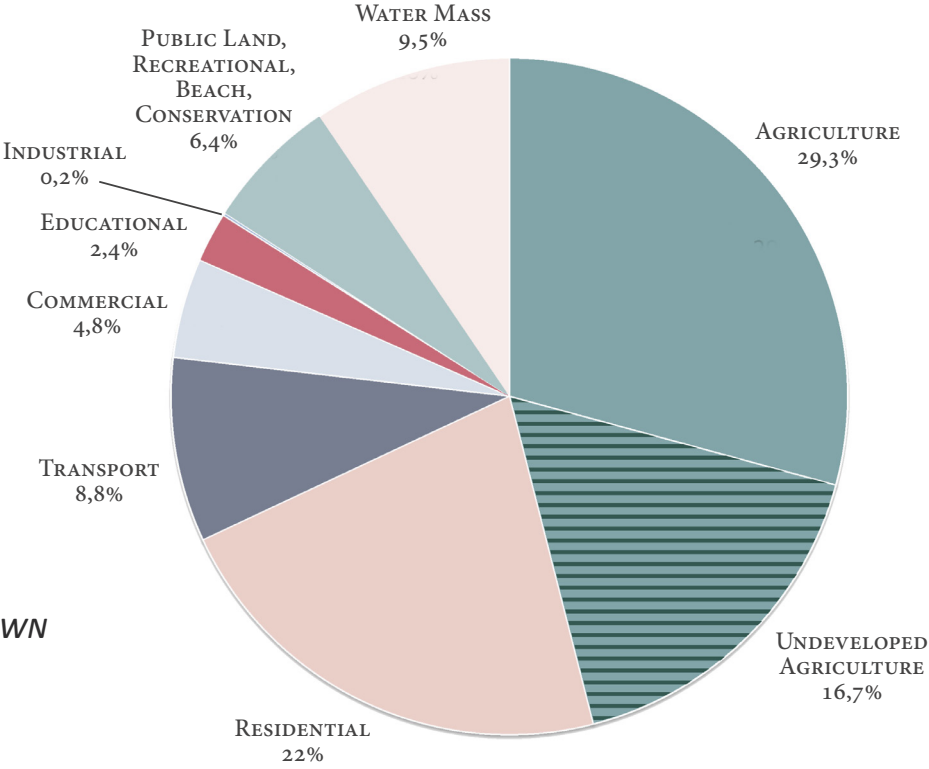


image 44. Malindi Town Land Use (KCG 2015)



image 45. Impact of Galana Sabaki River Siltation Discharge at Malindi Beach (own image)

EDUCATION, HEALTH, AND RECREATION

Malindi has an acute need for more educational and recreational facilities. There are currently five colleges in Malindi, but no university, no agriculture schools, no technical or vocational institutes (KCG 2015, 5.77), and no town library (5.86). School attendance rates are low (Hoorweg, Foeken and Obudho 2000, 403), the educational facilities are deficient, the level of education is low, and the town struggles to attract competitive teachers.

Healthcare is also presenting a significant shortage of community clinics (KCG 2015, 5.80). The town has no parks, no sports centers, and a deficit of playgrounds and diversity in recreational opportunities (5.83).

NATURAL LANDSCAPE FEATURES

THE GALANA - SABAKI RIVER

The Galana-Sabaki River is the second longest river in Kenya, flowing 390 km long. It springs in the Central highlands around Mount Kenya and enters the Indian ocean 10km north of Malindi. During the heavy rain season (January - March), the river discharges 80 percent of its yearly sediment into the ocean.

Deforestation done too close to the river, intended to clear land for agriculture purposes, as well as poor farming practices upriver, negatively affects the siltation of the water (Amin and Willetts 1986, 101; Schoorl and Visser 1991, 27). River siltation leads to an increase in the silt discharge

on the Malindi coastline, widening the beach and killing the coral reef in the northern section of the Malindi Marine National Park (Schoorl and Visser 1991, 5; Obura 2001, 1274). As a result of the river siltation, the ocean water in Malindi is often murky, and the hotels find it necessary to build swimming pools.

As the river discharges are destroying the coral reef, heavy waves reach the coast, and the Malindi resort becomes a favorable surfing spot at the end of summer (Amin and Willetts 1986, 101).

THE MALINDI MARINE NATIONAL PARK

Malindi Marine National Park is located south of Malindi, 2km off Casuarina Point. Together with the Watamu Marine National Park they form the Malindi National Reserve and are the first Marine Protected Areas to be established in Africa, in 1968. They were designated as Biosphere Reserves by UNESCO in 1979. Malindi Marine National Park extends over 630 hectares. (Schoorl and Visser 1991, 10-12).

The park's marine bio-system includes fringing reefs, offshore reefs, seagrass beds, mangroves, and lagoons filled with stunning brightly-colored coral gardens (Schoorl and Visser 1991, 12). Vegetation and sea life is monitored and protected (10). Therefore, modern fishing methods that include the use of spear guns, or any other activities that would be damaging the reefs, are strictly forbidden inside the park. Traditional fishing is permitted (11). The area is considered one of the most enjoyable scuba-diving and snorkeling sites the Kenyan coast has to offer.

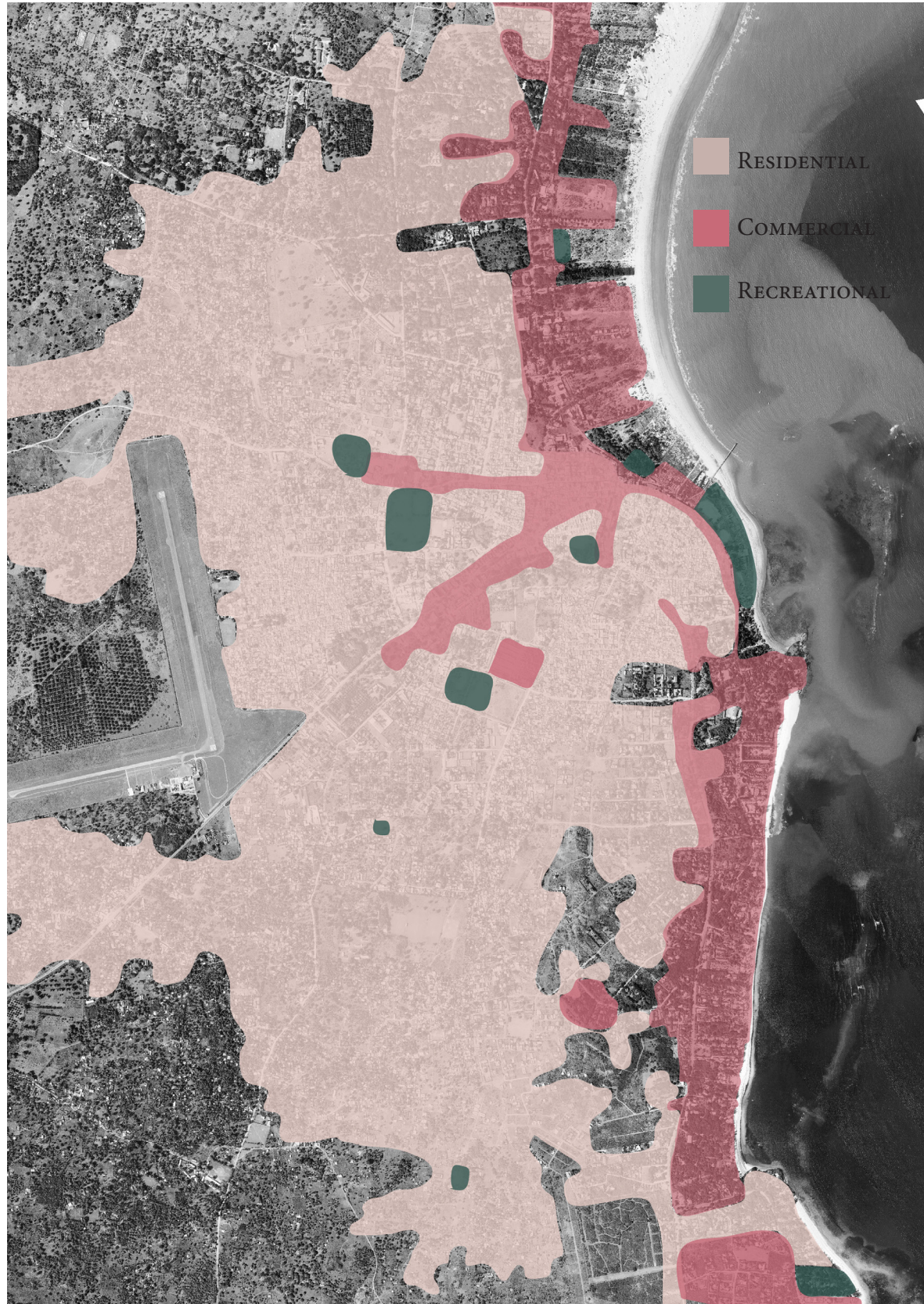


image 46. Organic Development of Residential and Commercial Areas in Malindi.

MAIN CHALLENGES RELATED TO THE URBAN ENVIRONMENT

“The center of Malindi town, which could be a fun place to hang out or shop, is one of the most dangerous places to be in the area as pedestrians have to dodge huge trailers and trucks plying the Lamu-Mombasa route and tuk-tuks, boda-bodas, and cyclists, all of whom compete for space on a very badly constructed, narrow, pot-holed road that has no pavements.”
(Daily Nation, 2016)

URBAN INFORMALITY

The influx of job seekers in Malindi has led to a rapid population growth that is not being systematically addressed with increased housing. Before 2012, tourism-related jobs were highly sought after in Malindi. In the early 2000s, the town was experiencing up to 20% in-migration from upcountry population seeking employment in the tourism industry. The new emerging tourism developments required a sizeable supporting workforce but did not facilitate accommodation for the workers. Malindi town was not prepared to answer the rapid urbanization demands of the 1980s and early 2000s. Furthermore, land ownership in Malindi remains uncertain in many parts of the town.

As a result of inadequate housing and unclear land ownership, Malindi developed informal settlements. There are seven officially recorded informal settlements in Malindi: Kisumu Ndogo, Majengo, Alaskina, Dongo Kundu, Barani, Maweni and New Stage (KCG 2013, ES-10). However, according to UN-Habitat, half the houses in Malindi classify as informal dwellings (UN-Habitat 2016a, 11). Furthermore, an

unofficial inventory by the Muungano Support Trust in partnership with Muungano wa Wanaviji (Kenya Federation of Slum Dwellers) counted 20 informal settlements in Malindi. The population that lives as squatters knows that they do not own the rights to the land they occupy. Without land ownership, locals cannot make any investments on the land they use.

POOR CONNECTIVITY TO THE WATERFRONT BY THE PUBLIC

Lack of tourism development regulations for the Kenyan Coast region mixed with inadequate planning decisions led to uncontrolled hotel developments in Malindi. As a result, significant portions of the most attractive waterfront areas are now owned by foreign investors and used for tourist facilities. Most hotel areas in Malindi are segregated, not linked with other parts of the town, and not connected with the local public beaches.

Hotel developments using the areas closest to the ocean limit the locals’ access to the beach (Dieke 1991, 277; Sindiga and Hanunah 1999, 26; 33). The locals would use the beach for recreation and gathering resources (fishing, harvesting seaweed), but hotels built next to the beach limit their activities at the shore. Moreover, in areas where hotel proprietries are developed side by side in a strip, open access to the beach is scarce. The public beach areas in Malindi are limited. This is because many public beaches been converted into private beaches and are open only to hotel guests (Wamwara-Mbugua and Cornwell 2008, 106). Furthermore, public beaches lack facilities and proper accessibility from the town. As a result, most locals stop using the beach as a relaxation space.

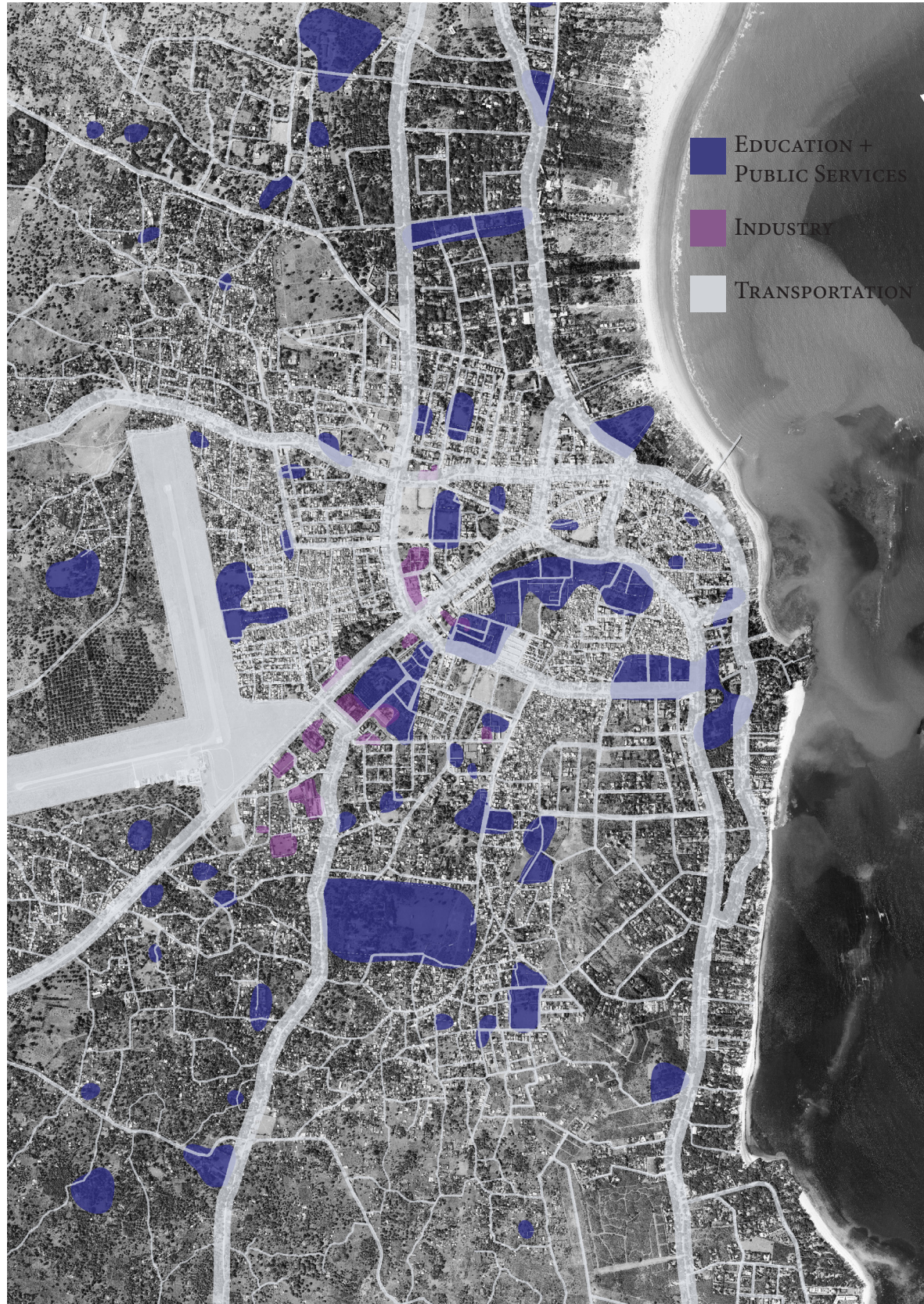


image 47. Education, Industry, Transportation.

THE CURRENT INFRASTRUCTURE SITUATION

The coastal Swahili population does not like to mix with non-Muslims and does not seek to get involved with population from up-country. During the colonial years, their primary income came from trading with the Middle East. According to Sindiga (1996b), the British administration decided to allow them to live in segregation, and thus bypassed them when building the country's infrastructure. The British colonial administration decided to focus instead on "the demands of the European settlers in the interior of the country" (Sindiga 1996b, 427). Only after Kenya gained its independence, and coastal tourism started to grow, the local government began developing the infrastructure of the town (Sindiga and Kanunah 1999, 30).

However, although tourism development has positively influenced some of the infrastructure development within the city (Kitsao 2010, 40), the overall condition of the infrastructure in Malindi is inadequate, facing significant challenges. Today most roads in Malindi are still unpaved (UN-Habitat 2016a, 11). Sanitation and street lighting are generally a problem. During 2005-2010 the Municipal Council has extended street lighting within the business district by 110 electricity poles (41); however, the beaches in Malindi still lack public toilet facilities and night illumination. Only half the town's population has access to garbage collection services (11). Many economic activities are not supported by the appropriate facilities. Although a large number of residents are fishermen, Malindi does not have a functional fish market (KCG 2015, xii).

The lack of proper sewage systems in the informal neighborhoods of Malindi is the cause for an increase of contaminated wells. Although the

water is unfit for drinking, often locals continue to use the contaminated water. Houses typically only have pit latrines, and only some have septic tanks for waste disposal (Schoorl and Visser 1991, 41). Surprisingly also, not all hotels are connected to sewage systems, leading discharges to the sea (Sindiga 2000, 223). Many beach hotels use septic tanks, but the overflow from the tanks soak into the pits, contaminating the water that eventually infiltrates the soil and the groundwater (Schoorl and Visser 1991, 39). Most town neighborhoods also lack water drainage infrastructure (UN-Habitat 2016a, 11).

ENVIRONMENTAL DEGRADATION

Malindi town has an inadequate number of green spaces, parks, or open recreation spaces (KCG 2015, xii). Public spaces are often used for informal purposes, or are developed into commercial spaces (KCG 2015, 7-4).

Siltation of the Galana - Sabaki river leads to an increase in the silt discharge on the Malindi coastline. The ocean water in Malindi is often murky, widening the beach and killing the coral reef in the northern section of the Malindi Marine National Park (Schoorl and Visser 1991, 5; Obura 2001, 1274).

Local farmers do not invest in properly caring for the sustainability of the soil, partially due to poor agricultural practices or lack of finances, and partially due to insecurity of tenure (Waaijenberg 1993a, 19). Inconsiderate anthropogenic practices (such as overfishing, poaching, illegal deforestation, overdevelopments) disturb the ecological balance and biodiversity of the environment (KCG 2015, 7-1).

MALINDI AS A TOURIST DESTINATION - CONNECTIVITY (2019)

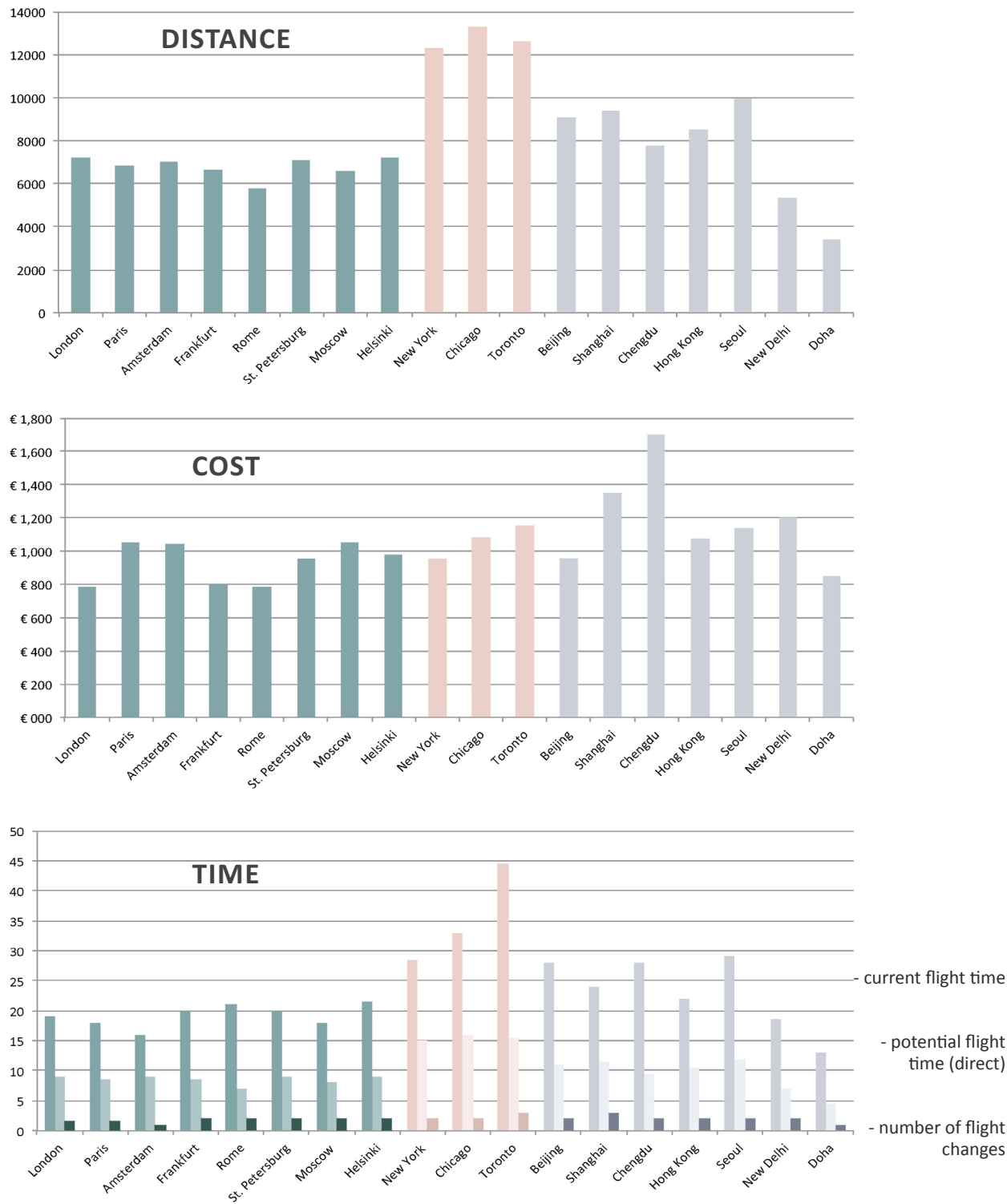


image 48. Malindi Connectivity by Air: Distance (km), Cost (euro), Time (hour).
Calculated for an Economy class flight Wednesday 6.3.2019.



image 49. Malindi Connectivity by Air

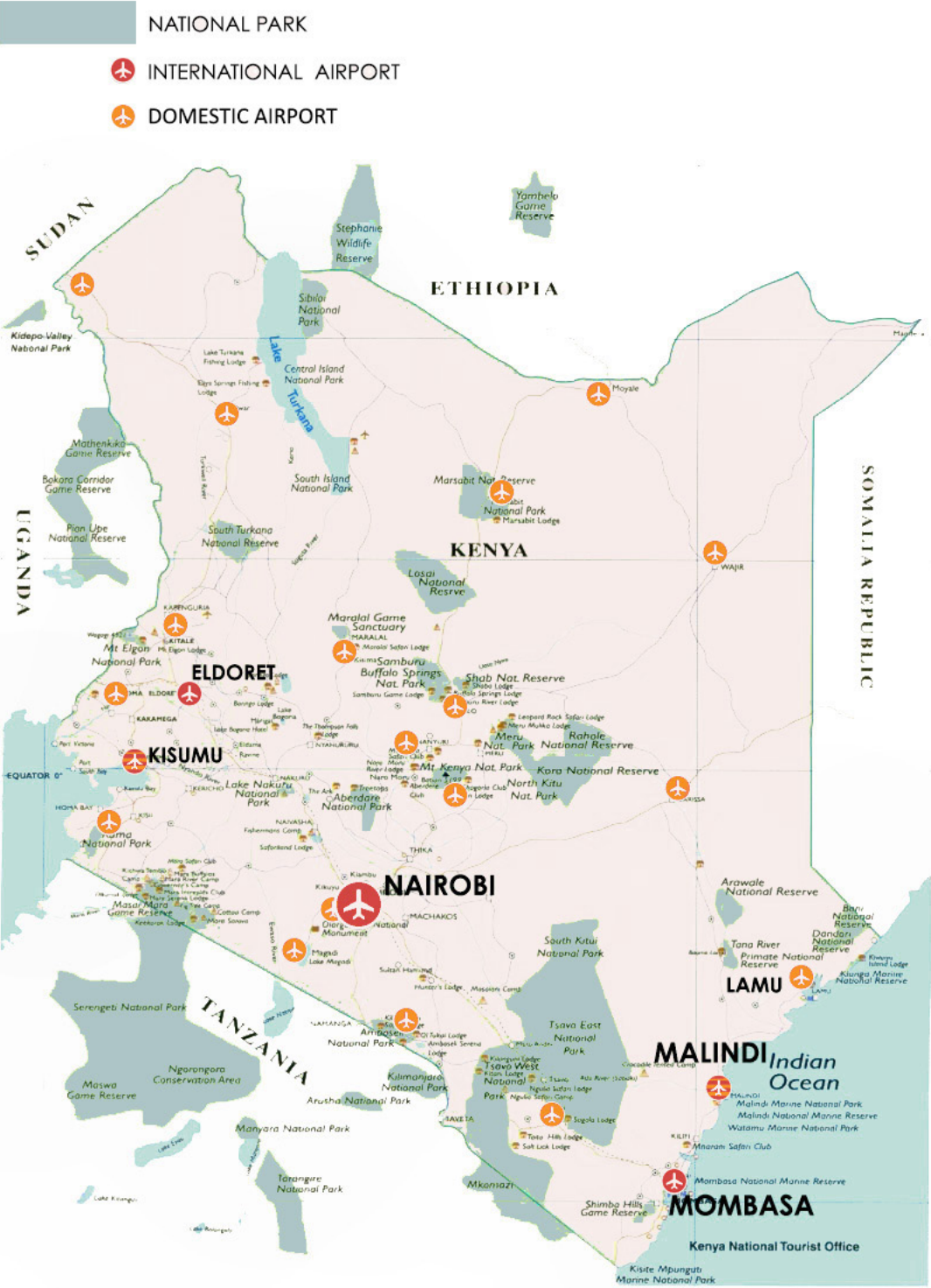


image 50. Malindi Connectivity by Air: Domestic Tourism Potential.

MALINDI AS A TOURIST DESTINATION - SWOT ANALYSIS

S

STRENGTHS

- Already established as a tourist destination;
- Beautiful natural setting;
- Proximity to the airport;
- Well connected to the rest of the country;
- Good reputation for hospitality ;
- Available land;
- Tourism experience and knowledge;
- Nairobi Airport is the air transportation hub in eastern Africa;

W

WEAKNESSES

- Inadequate physical infrastructure, especially roads, water, sewage, sanitation, solid waste disposal;
- Poor road condition and traffic segregation;
- Water siltation;
- Poor spatial planning;
- High level of unemployment;
- Inadequate housing conditions;
- Low level of education;
- The beach is not as beautiful as in Watamu, 20km south;

O

OPPORTUNITIES

- Unused tourism potential, e.g. agrotourism, cultural events, domestic tourism, cruises;
- Africa, Asia, and the Middle East are the rising markets in the tourism industry;
- Political goodwill and interest to invest in tourism;
- Improving environmental awareness;
- Kenya's diverse tourism products;
- Renewable energy sources;
- New technologies;
- Social media;

T

THREATS

- Occasional negative media publicity;
- Increasing tourism competition in the region;
- Social media;
- Increasing investment in tourism by neighboring countries offering similar touristic product;
- Negative perceptions of security;
- Land grabbing;
- Corruption and bureaucracy;

image 51. Malindi as a Tourist Destination SWOT Analysis

5. URBAN DEVELOPMENT

MALINDI INTEGRATED STRATEGIC URBAN DEVELOPMENT PLAN (ISUDP)

“African countries compile lists of expected outcomes from tourism development rather than provide an agenda to pragmatic action.”
(Sindiga and Kanunah 1999, 26)

One of the foremost challenges Malindi has been facing is identified in the previous chapter as the lack of urban planning regulations. In 2014, UN-Habitat started to work together with the Kenya Municipal Program (KMP) providing support and technical advisory towards effective realization and implementation of participatory strategic urban development planning in the country. The Kenya Municipal Program (KMP) was trying to identify and address the main challenges faced by the urban areas in Kenya, especially inadequacies in planning and infrastructure (UN-Habitat 2015a, 1). UN-Habitat supported KMP through organizing workshops that would equip local leaders with the necessary tools and techniques to tackle the strategic planning task (UN-Habitat 2016a, IV). This collaboration between UN-Habitat and KMP is particularly relevant because it generated the creation of Integrated Strategic Urban Development Plans (ISUDP) for several secondary urban centers in Kenya, including Malindi.

Malindi’s first *Integrated Strategic Urban Development Plan* (ISUDP) and first digital topographic mapping were developed by

Kilifi County Government, with support from the Ministry of Land, Housing and Urban Development, between 2014 and 2015 (KCG 2015), in parallel with Kilifi County’s first development plan (Kilifi County Integrated Development Plan 2013-2017). The ISUDP aims to respond to challenges regarding planning, housing, and urban informalities, to develop infrastructure, to promote tourism, and to stimulate socioeconomic advancement for Malindi region (KCG 2015, 1.1).

PREPARING THE ISUDP

The planning and development of the Malindi ISUDP started with capacity building workshops in November 2014 (KCG 2015). The workshops aimed to facilitate participatory planning, involving local representatives in the planning process (KCG 2015, ix). The workshops therefore involved local stakeholders; local elected government officials; central government representatives from the department of housing, planning and infrastructure development, land survey; local government representatives such as Kilifi county officials responsible for education, security, environment, trade, social welfare, communication and technology, industry, finances, health; and representatives of local organizations and associations such as farmers, cultural and religious groups, street vendors, sports, informal settlements, NGOs, market, transport associations, youth organizations, and other relevant organizations (iv-vi). The workshops discussed the current condition of Malindi town, explained the planning approach,

KEY IDEAS AND PROPOSALS explored during the capacity building workshop
<div>1. ENVIRONMENT<ul style="list-style-type: none">• protection and conservation of the marine environment;• river siltation management with the use of modern technologies;<ul style="list-style-type: none">• solid waste management;• harvesting energy from natural resources, wind and solar;• irrigation for agriculture along the Galana-Sabaki river;<ul style="list-style-type: none">• development of recreational spaces;</div> <div>2. URBAN DEVELOPMENT<ul style="list-style-type: none">• proposal for decentralized development;• poli-nuclear development, planning for satellite towns;<ul style="list-style-type: none">• addressing urban informality;• addressing land insecurity and ownership;</div> <div>3. TRAFFIC MANAGEMENT<ul style="list-style-type: none">• addressing the current linear urban development which creates traffic congestions;<ul style="list-style-type: none">• construction of alternative routes for heavy traffic;<ul style="list-style-type: none">• linking Malindi to Watamu along the beach;<ul style="list-style-type: none">• segregating modes of transport;<ul style="list-style-type: none">• central bus park;• fuel stations for marine transport;</div> <div>4. INFRASTRUCTURE<ul style="list-style-type: none">• water supply and storage;• sewage disposal and sanitation;• access roads to public beaches;<ul style="list-style-type: none">• sport facilities;</div> <div>5. SOCIOECONOMIC<ul style="list-style-type: none">• investing in education and early childhood development;<ul style="list-style-type: none">• addressing unemployment and drug abuse;• diversification of economy by developing agro-processing industries;<ul style="list-style-type: none">• modernizing the fishing industry;• advocating for participatory planning;• community empowerment through inclusive urban governance;</div>

image 52. Key Ideas and Proposals for Malindi Integrated Strategic Urban Development Plan, explored during the capacity building workshop, 26 November 2014. (Kilifi County Government 2015)

examined the most pressing issues that the ISUDP needed to address (x), and defined a vision statement (xix).

The main goals of the ISUDP are to define a 20-year vision for the Malindi municipal region, to develop land use and zoning plans, and to create strategic action plans for managing infrastructure development and project implementation (KCG 2015, 1.4). Malindi town covers an area of 50.91km² (2.29), but the ISUDP area extends to the Malindi municipal region of 677km² (1.3).

The ideas generated from the capacity building workshops focused on environmental concerns, urban development patterns, traffic management, infrastructure development, and socioeconomic advancement. The workshop also designed a vision statement for Malindi: “Developing Malindi as an international tourist destination with world-class infrastructure and vibrant economy” (KCG 2015, xix).

The *Integrated Strategic Urban Development Plan* (ISUDP) spatial development proposal studies the interconnection of different land uses, and advocates for urban growth and economic advancement (KCG 2015, 3.1). During the ISUDP preparation phase, the plan development strategy recognized that uncontrolled organic urban growth leads to informal settlements, inadequate road accessibility, and insufficient access to infrastructure. As a response, it discussed several urban planning principles for the ISUDP to incorporate in order to avoid the

implications of uncontrolled development: poly-nuclear development, radial growth pattern, low-rise - low-density development, green growth and participatory planning (3.1).

The ISUDP preparation phase briefly described several scenarios of urban growth in Malindi: redensification of the central town Shella and Barani sub-locations; high growth and densification of the western peri-urban side of Malindi town; high growth and densification in the outer rural areas (KCG 2015, 3.2). However, it is important to mention that these scenarios list possibilities, without explanation of what would trigger such scenarios or how to develop them.

The preparation phase also explored different urban growth patterns for Malindi, as well as the natural growth constraints imposed by the Indian Ocean, Arabuko Sokoke forest, Mida Creek and the Galana-Sabaki river (KCG 2015, 3.13). The final ISUDP advocates for combining the opportunities for radial development of Malindi town (3.17) with the potential for poli-nuclear, decentralized development of the Malindi municipality (3.15). The poli-nuclear development idea is explored through attributing a “development theme” to every growth center within the Malindi municipality (4.1). They are described as centers focusing on trading, culture, heritage, tourism development, or industry. It is important to note that the ISUDP does not include a development strategy that would explain how these images are to be achieved. As an example, Watamu town is proposed to develop

as “Eco Tourism Town,” but the recommended projects are simply a railway station and “more facilities such as hotels, commercial, educations, recreation” (4.7).

for building water transport infrastructure. The infrastructure development plans are followed by extensive project proposals, strategies and action plans (6.12-26).

ISUDP COMPONENTS AND KEY PROPOSALS

LAND USE REGULATIONS

A key to purpose of the Malindi ISUDP is to regulate the development of the urban structure. The ISUDP presents land use plans and comprehensive land use regulations. The land use component of the ISUDP focuses intensely on redistributing vacant land to be used for residential, educational, recreational and commercial purposes (KCG 2015, 4.4.). A portion of agricultural land is also redistributed. The new land use plan proposes new markets and trading centers, new community facilities, a new university as well as a new medical and nursing collage in Malindi town, new landfill zones, cemeteries, and new recreational facilities: two stadiums, an amusement park, two sports centers, a food park and a zoo.

PHYSICAL INFRASTRUCTURE

The most extensive chapter of the ISUDP focuses on the development of the physical infrastructure (KCG 2015, 5. 13-76). The ISUDP discusses various systems for answering different infrastructure needs; includes detailed plans of proposed networks for water supply, rainwater drainage, sewage and sanitation; and explains numerous projects dealing with water management, solid waste management, electricity production and distribution, road development, and transportation. It also discusses proposals

SOCIOECONOMIC INFRASTRUCTURE

The ISUDP explores project proposals that encourage economic development and new employment opportunities. The unemployment rate in Malindi is strikingly high, 48%. It is projected to decrease to 40% by 2035 even without intervention, but the ISUDP predicts that with new investments the unemployment rate could be reduced to 18% (KCG 2015, 5.4).

The economic development component discusses the economic potential of agriculture and fishing, and proposes investments into the agriculture sector as well as reforms. ISUDP projects and action plans related to agriculture and fishing include creating an agricultural research institution; promoting modern methods of farming; supporting farmers with easier access to seeds, fertilizers and veterinary services; expanding butterfly farming for silk production and commercial trade (5.7); developing facilities needed for fishing trade (related to unloading, storage, transportation) and constructing a fish market (5.8). Trade economy is also supported through projects such as the revitalization of the business district, rehabilitation of existing markets, new proposed commercial areas, infrastructure improvement (5.9).

Furthermore, the ISUDP covers the social infrastructure, recognizing that education and healthcare are valuable components contributing to human resource development. It proposes increasing the number of educational, healthcare and recreational facilities; it promotes vocational skills training; it supports building community

VISION STATEMENT
“ Developing Malindi as an international tourist destination
with world-class infrastructure and vibrant economy ”

image 53. Vision Statement Defined at the Capacity Building Workshop (Kilifi County Government 2015, xix)

capacity; and it allocates the land needed for the proposed new developments (KCG 2015, 5.77-88). The ISUDP proposes the new establishment of a university, a technical college, a medical and nursing institute, a public library, an agriculture college and research center, a retirement home, and a rehabilitation center, all institutions which are currently missing from Malindi town (5.77; 86). It also discusses the long-term goal of building a zoo, an amusement park, and a waterpark and the urgent need for developing neighborhood parks and playgrounds (5.84).

ENVIRONMENT

The ISUDP establishes environmental conservation zones around the Arabuko Sokoke forest, Mida Creek and mangrove forest, the Galana- Sabaki River riparian reserve, and the marine parks (KCG 2015, 7.1), and proposes conservation of open spaces within the town which are to be used for recreational purposes (7.4). It describes several strategies and action plans related to environmental sustainability: policies to protect coral reefs, mangroves, turtle nesting beaches; strategies to regulate the Galana-Sabaki river siltation; action steps to improve the beach infrastructure; projects to enhance environmental education.

TOURISM

The ISUDP proposal for tourism advancement is to develop a “tourism corridor” along the coastline connecting Lamu, Malindi, Watamu, and Mombasa through good transport connections (KCG 2015, 8.1); to rehabilitate and protect the cultural heritage sites along the coast (8.2); to develop new recreational facilities (playgrounds, parks, mangrove park) and new tourism entertainment sites (a zoo, an amusement park, a waterpark); to expand the

tourism product (8.4); and to enhance the safety of tourist sites (8.5) The strategies for reviving the tourism industry include investing in promotion campaigns through “aggressive marketing of the county as tourist destination” (KCG 2013, 127), encouraging domestic tourism in order to fulfill the current low hotel occupancy, and improving the physical infrastructure of the town (135).

ISUDP IMPLEMENTATION

“... implementation is the bedrock upon which strategies and guidelines of urban development plans are translated into action.”
(UN-Habitat 2016a, 15)

The implementation process is an imperative part of planning. UN-Habitat acknowledges that Kenya often experiences frustrating results in planning progress due to ineffective implementation (UN-Habitat 2016a, 15). The bureaucratic plan authorization system in Kenya and the frequent situation of insufficient skilled personnel are often the cause of delaying the plan implementation process. This leads to plans waiting unconfirmed and resources being wasted. Furthermore, when project implementation is delayed too long, and the urban structure develops without a plan, the plan becomes outdated, no longer relevant or even no longer viable.

It is essential for the urban planning process to consider the realities of the urban fabric, especially regarding informal settlements and unplanned developments (UN-Habitat 2016a, 16). If strategic planning fails to recognize the realities of the socio-spatial fabric, the proposed projects will not achieve successful implementation. Furthermore, urban development plans need to acknowledge the financial realities, and to

utilize local resources efficiently. Implementing extensive urban development projects in Kenya often involves financial investments that are unrealistic compared to the existing funds (UN-Habitat 2016a, 17). A good plan prioritizes long-term needs revolving around a strong vision and focuses on phased action plans (UN-Habitat 2018a, 14). This ensures that the plans carry through, even when the political environment changes.

Lastly, the implementation of urban development plans must include suitable monitoring and frequent assessments regarding the efficiency of the implementation process (UN-Habitat 2016a, 19). Furthermore, project completions also require to be evaluated. The Malindi ISUDP adequately describes project implementation processes in the case of infrastructure developments and frequently outlays phased action plans. In 2018, the Kilifi county government also issued an updated *County Integrated Development Plan* (KCG 2018) reviewing the implementation of the previous 2013-2017 *County Integrated Development Plan* (CIDP), underlining achievements and presenting unexpected challenges (KCG 2018, 70-81).

INTERNATIONAL DESIGN COLLABORATION FOR KENYA

After the development of the *Integrated Strategic Urban Development Plans* (ISUDPs), UN-Habitat’s support towards the Kenya Municipal Program extended “to include Kenya’s planning schools advancing their training” (UN-Habitat 2016b, 2) through facilitating the planning of design components to complement the ISUDPs by connecting the local students with urban planning and design students from around the world. This was done by developing, in 2016, an international competition, *International Design Collaboration for Kenya* (IDCK), in collaboration with Urban Development Department of Ministry of Land, Housing and Urban Development of Kenya.

The aim of the *International Design Collaboration for Kenya* (IDCK) competition was to generate creative urban design ideas and solutions that were to complement the ISUDPs, to highlight the “opportunities and the limitations of the ISUDPs”, and to give local planning students the opportunity to improve their experience by working alongside international students and

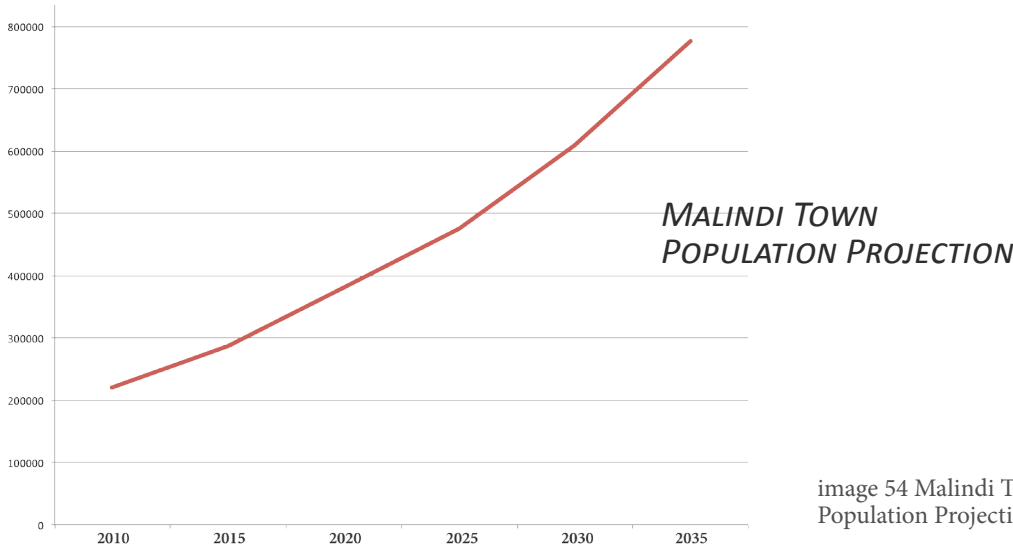


image 54 Malindi Town Population Projection (KCG 2015)

in multidisciplinary teams (UN-Habitat 2016b, 2). The Malindi ISUDP plan was not finalized at the time of the competition; however, Malindi was part of the competition, and a preliminary ISUDP report from October 2015 was provided to the participating students. The competition included other eight urban centers spread across Kenya: Embu, Kitui, Machakos, Mombasa, Nakuru, Naivasha, Nyeri, and Thika.

The competition assignment for Malindi was directed towards the town’s waterfront. The site selected was a 620ha section of the waterfront area running from Casuarina beach up to the Galana river, which includes many hotels and tourist facilities, but also the public Malindi beach, the Shella neighborhood, which is the oldest village of Malindi, and informal settlements. The assignment’s main requests were to enhance public space and economic productivity. In support of the ISUDPs, the competition asked for “local economic development through enhancing tourist development and commercial activities” (UN-Habitat 2016b, 18).

It is important to note that, although the competition brief specified the existence of the informal urban developments and highlighted the poor infrastructure and the limited public access to the beach, it did not explain the complexity of the impact of tourism in Malindi. At the time of the competition, tourism in Malindi was facing a massive decline. Many hotels and tourist facilities were closed, people were left without jobs, and the area along Casuarina road which was part of the competition site gave the acute impression of Malindi becoming a “ghost town” (Lanji 2016). Quite the contrary, the competition brief painted Malindi as a lively and attractive tourist destination, which is no longer the reality of Malindi today.

COMPETITION PROPOSALS AND OUTCOME

The competition jury selected the best projects for each of the nine cities to exhibit at the UN-Habitat Headquarters. Two projects were selected for Malindi because the jury concluded that neither of the proposals was complete, articulate or strong enough to stand alone (UN-Habitat 2016c, 83).

The first selected proposal belonged to a team of students from Universidad de Guadalajara in collaboration with students from Technical University of Kenya, and was titled “Malindi Alive.” This project encouraged the use of public spaces by proposing new cycling and pedestrian routes, as well as introducing new public recreational spaces. The project also tried to promote the tourism industry and suggested new tourist entertainment spaces which, ideally, would create employment for the locals. The highlight of the project was its strong traffic component, proposing a new bus system to connect the hotel resorts along the waterfront to the rest of the town, car parking, and bike routes (UN-Habitat 2016c, 78-83). The “Malindi Alive” proposal offered simple, practical tools and solutions for addressing mobility, and for enhancing tourism development, without acknowledging the complexity of tourism’s impact in Malindi.

The second proposal, developed by a team from Politecnico di Milano and Jomo Kenyatta University of Agriculture and Technology, was titled “Malindi Waterfront as Socio-ecological Infrastructure.” This proposal reclaimed the coastline as an essential public socio-ecological resource. The waterfront was developed to be more than a beautiful environmental element: an area to foster local economic progress, and

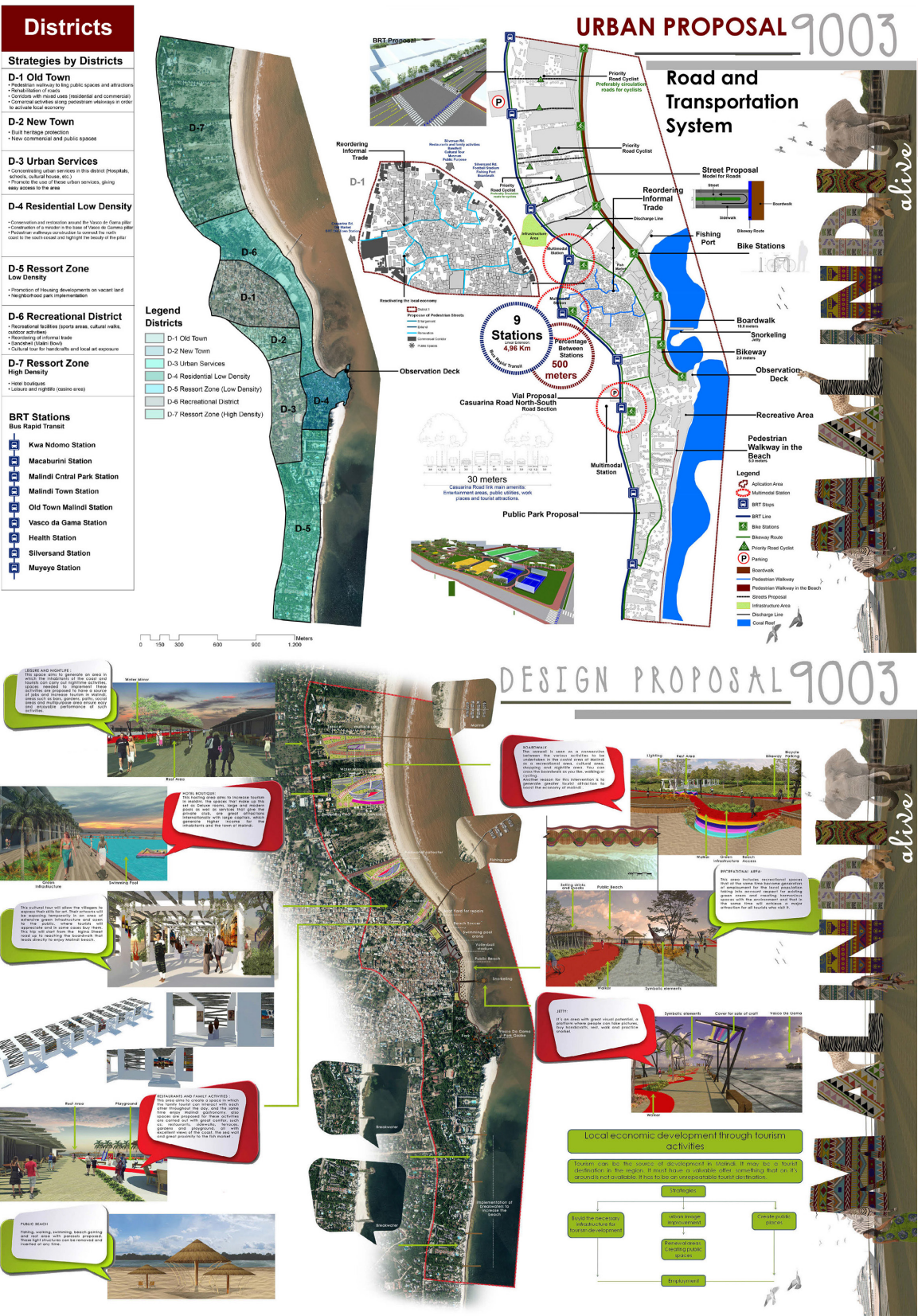


image 55. IDCK Competition Proposal for Malindi: Malindi Alive (UN-Habitat 2016c)

a platform for social interaction and cultural empowerment (UN-Habitat 2016c, 84-89).

The “Malindi Waterfront as Socio-ecological Infrastructure” team was lead by Alessandro Frigerio, professor of architecture and urban studies at Politecnico di Milano, who had previously researched the challenges of rapid urbanization in East Africa. Their comprehensive proposal addressed many of the site’s complex issues with urban design solutions, in direct response to the competition. For example, the project proposed two deep-water mooring docks that would protect the marine environment and the ecosystem of the coastline as well as defend the beach from erosion (Frigerio 2018, 26-27). The project also suggested the development of an ocean and climate change research institute that would promote a knowledge economy and cross-cultural interactions (27-28). These ideas were explained by Figerio in 2018, but were not fully portrayed in the completion proposal and therefore not understood by the jury in 2016, because the visual component of the proposal was not emphasizing them. As an example, in 2018 Figerio wrote that the mooring dock pier was “imagined as a testing ground for tidal power production” (Frigerio 2018, 27), but this idea was not portrayed in the 2016 competition submission. Moreover, although this idea sounds interesting, in reality it can have a significant effect on the bio-ecology of the marine environment, and furthermore, the technology for capturing tidal power is only effective when planted in areas with low sedimentation to avoid high maintenance costs (Hammar et al. 2012, 4941), which is not the current case for Malindi beach.

Both teams presented their projects and discussed with local government officials in June 2016, but so far no elements from these proposals have been implemented in Malindi.

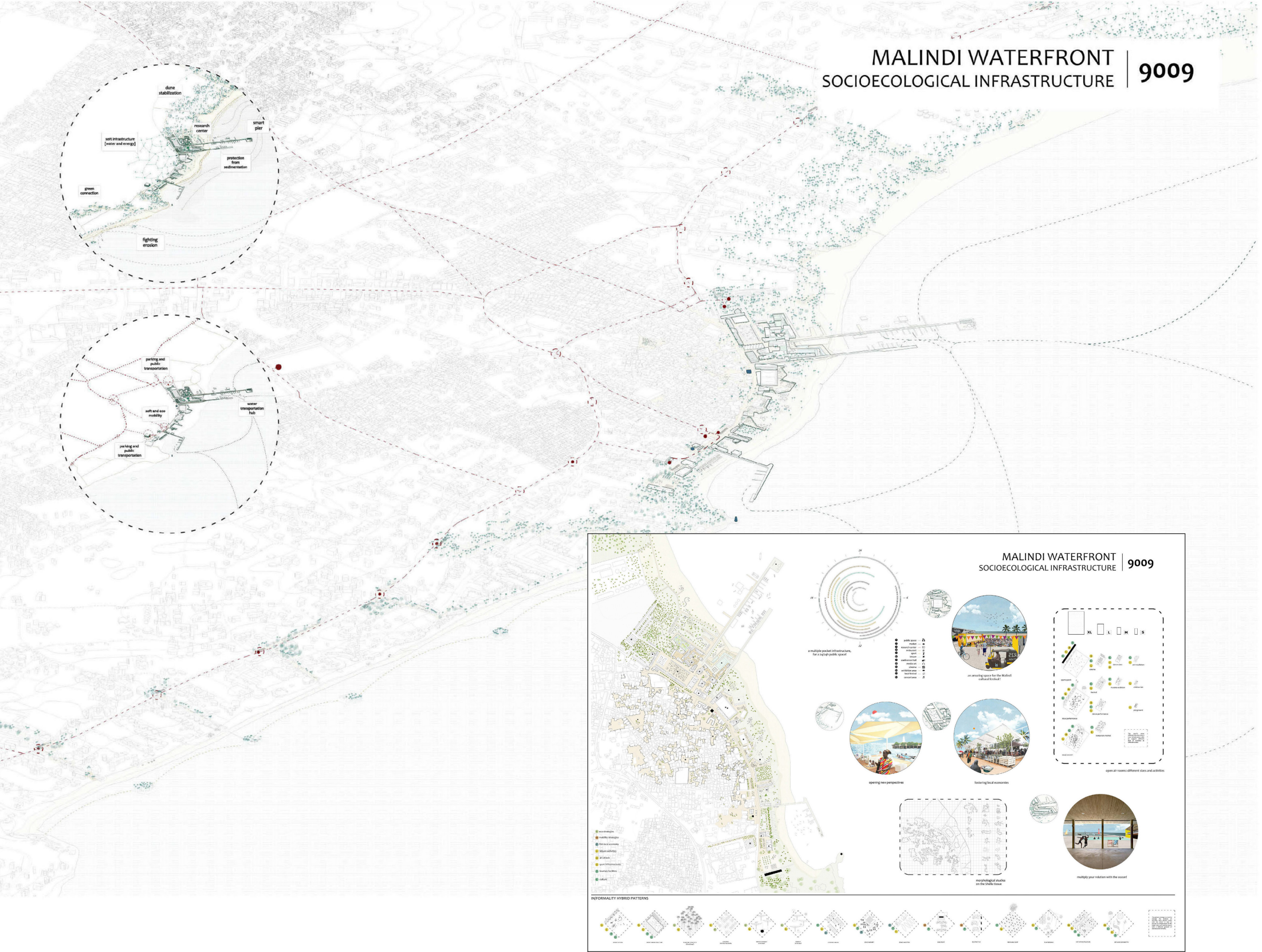


image 56. IDCK Competition Proposal for Malindi: Malindi Waterfront as Socio-ecological Infrastructure (UN-Habitat 2016c)

LOCAL RESOURCES AND
DEVELOPMENT POTENTIAL

“From the mid-19th century onwards the agricultural potential of the southern Kenya coast has been described frequently in superlatives.”
(Waaijenber 1993b, 68)

SUN AND WATER:
RENEWABLE ENERGY

Kenya experiences high levels of annual radiation, most prominent in the Rift Valley region and along the coast, including Malindi. In Kenya, solar power energy technologies are generally considered economically advantageous only for small scale use in remote locations. However, recent studies indicate that the current cost of electricity from grid-connected photovoltaic systems is below that of electricity generated from conventional power plants (Ondraczek 2014, 604), because the data used in researching the feasibility of solar power generation in Kenya is outdated, since in the last decade the cost of solar energy technologies has declined considerably¹. Because Kenya’s electrification level is under 20%, the potential from solar power cannot be overlooked.

Tidal and ocean current resources in Malindi are energy generating resources worth researching. In 2012, a study revealed seasonal average tidal current surface speeds at 100-140 cm/s off Malindi coast, and maximum spring speeds over 2.5ms-1 measured in Watamu, 20 km south of Malindi, which give great opportunities for generating electricity with the help of tidal current turbines (Hammar et al. 2012, 4945). The advantage of using tidal current turbines is the

1. Ondraczek (2004) explains that between 2008-2009 the cost of the essential components for solar photovoltaic systems decreased by 50%.

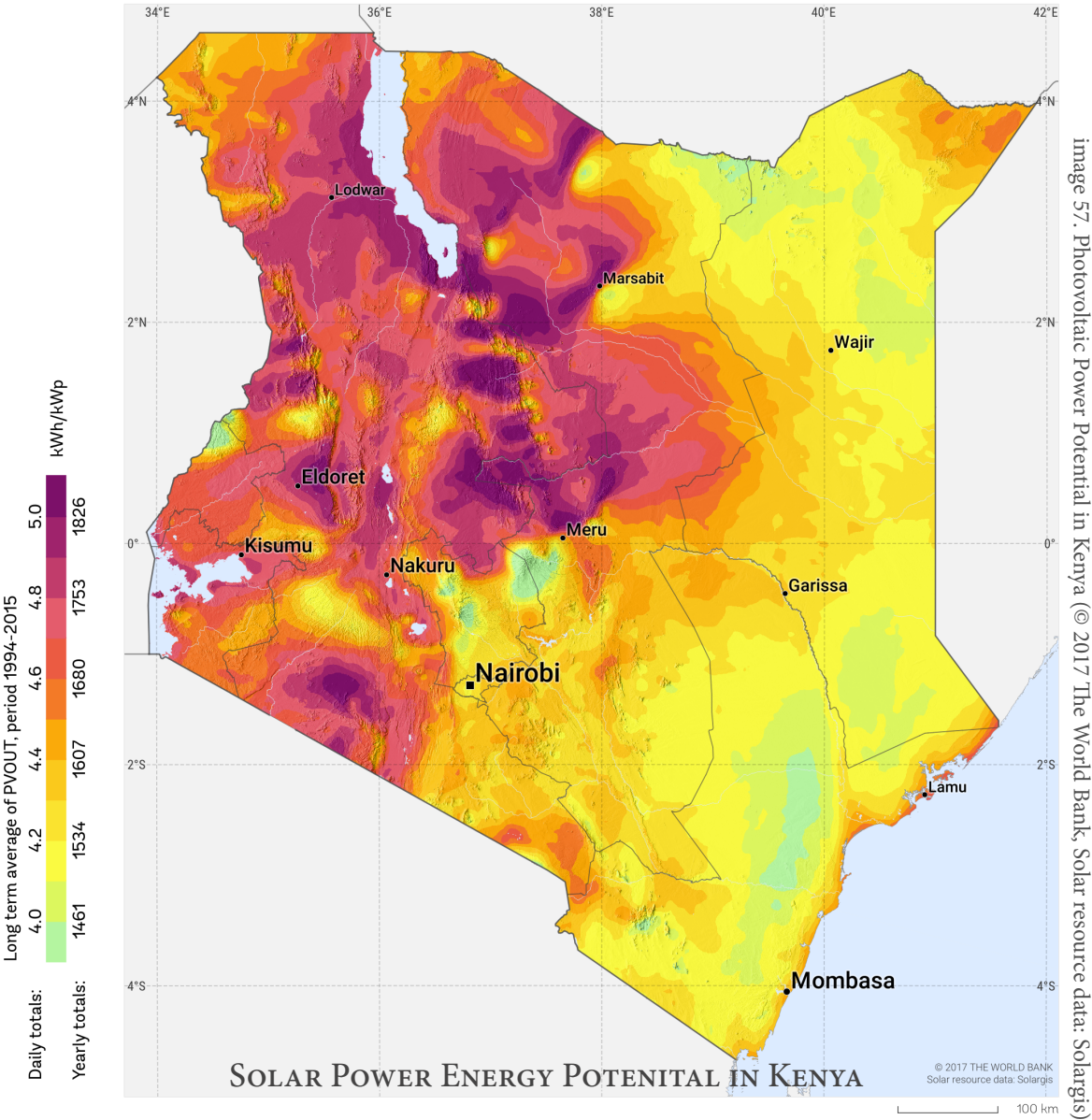
measurable and predictable power generation as well as the limited need to adjust the organic flow of the tide, but the drawback is that the energy generation is uneven (4941). Nevertheless, tidal power can be an inexpensive method for decentralized electricity generation.

Furthermore, although wave and current power levels off the Kenyan Coast are only rated as conditional, influenced by the East African Current and the monsoon season, they have the potential to cover agricultural irrigation needs (Hammar et al. 2012, 4948).

AGRICULTURE

The coastal plains topographic zone widens to 30 km inland around Malindi. Kilifi county soil is generally made of sand and coral limestone and is therefore often sandy and dry, except the areas along the Galana-Sabaki river, which are, by contrast, very fertile (Foeken 2000, 30). Malindi district includes agro-ecological areas best suitable for coconut, cassava, cashew, and millet (35).

Before the British administration was established in Kenya, the Swahili population extensively used coastal land in agriculture, which help of slaves. Agriculture was a profitable economy at that time (Hoorweg 2000, 312). However, after the abolition of slavery, Swahili landowners were not able to keep up the production of their plantations, and the agriculture economy faded. Many plantations were left unexploited. During the colonial times, the Kenyan Coast was settled by Mijikenda and former slaves, who planted tree crops on Swahili land, because new laws allowed them to harvest the trees they had planted. However, because they were living as squatters, they did not invest in caring for the sustainability of the soil (Waaijenber 1993a, 19).



Most coastal land is not suited for cultivating coffee and tea, the best-priced crops; nor corn, the staple crop. The best crops that grow in the coastal lands are cassava, millet and sisal and fruit trees like mango, banana, pineapple, coconut, and cashew. Coconut palm farming can generate a modest income when the leaves are sold as roof thatching and copra for coconut oil extraction. Vegetables also grow here, but not as

well as in up-country regions that receive better rains thought the year (Hoorweg, Foeken and Obudho 2000, 397).

Currently, agriculture is considered an untapped potential of the coast (Waaijenber 1993b, 68). The poor state of agriculture today is partially due to locals’ lack of modern farming skills and unwillingness to try new crops or new

farming techniques (24; 66), but this is mostly caused by the farmers' lack of finances to invest in new equipment and to take risks (214); and partially agriculture is not advancing because the squatters who farm the land are not concerned with taking care of the soil (Hoorweg 2000, 314; Waaijenberg 1993a, 19). In Malindi town, 45% of the land is allocated to agriculture, but only two-thirds of it are currently used (KCG 2015, 2.29). The northern side of the town near the Galana-Sabaki river is especially recognized to have high agricultural potential due to its fertile soils and accessibility to irrigation development (3.3; 5.6).

FISHING

Malindi Bay is known for deep sea fishing, but offshore fishing is mostly done for sport, and it is under-exploited as commercial revenue, although it could be a productive industry (Obura 1272). The coastline also offers a great variety of habitats for marine resources: creeks and mangrove swamps are excellent breeding grounds for fish and crustaceans (Hoorweg, Foeken and Obudho 2000, 394). Reef fishing is primarily done with traditional methods and tools. The Malindi National Park restricts all fishing methods which are damaging to the reefs and controls fishing intensity; therefore, the unprotected reefs are overexploited (Obura 2001, 1271).

MARICULTURE

The Kenyan coast is rich in seaweed, but the local Malindi community has been unable to produce commercial harvests mostly due to lack of seaweed farming skills and supporting infrastructure. Local fishermen have also attempted to cultivate oysters, prawns, and crabs, which are in high demand with the tourists but have been unsuccessful at it. Most locals do not consume oysters, and therefore do not have the necessary

aquaculture harvesting skills (Obura 2001, 1274). If these issues were to be addressed, aquaculture could become a thriving economy in Malindi.

FORESTS

After squatters took over the most fertile lands, remaining areas had little agricultural land available. The rapid growth of Malindi town, partially due to economic in-migration of upcountry Kenyans seeking employment opportunities in the tourism industry, raised the need for agricultural land to grow more food, so many deforestations took place. Some forest areas were cleared out illegally (Schoorl and Visser 1991, 47). Despite multiple deforestations, the Arabuko-Sokoke forest near Malindi remains the largest stretch of forest in Kenya, covering approximately 420 square km (Obura 2001, 1267). The Arabuko-Sokoke forest harbors various species of animals and plants, and can become an attractive touristic destination.

SALT MINING

Mangrove forests north of Malindi have been cleared out to make room for salt industry (Schoorl and Visser 1991, 53). Salt mining in Malindi is an active economic activity. However, expanding the salt evaporation basins by destroying mangrove forests is threatening the marine environment and exposing the coast to erosion and salinization (46; Obura 2001, 1274).

MALINDI AIRPORT

Physical infrastructure can also be seen as a resource with economic potential. Malindi airport is currently expanding to receive long distance international flights (Kiganda 2017), which is hoped to become an asset in the tourism industry.

REFLECTION

The rapid decline of Malindi's tourism industry is crippling the town's economy, and the young adult generation of locals are poorly equipped to build a thriving, diverse economy. The local government acknowledges the need to diversify the economy, but also hopes that reviving the tourism industry would revive the economy, and therefore, it continues to market Malindi as the perfect tourist destination and to invest in projects aimed at attracting tourists. The 2015 *Integrated Strategic Urban Development Plan* (ISUDP) writes that "tourism is booming in Malindi" (KCG 2015, 5.10), but, as observed in the literature review chapter, "booming" is far from describing the tourism situation in Malindi in the last 30 years, and the situation is even more severe since 2012.

In 2013 the local government made a considerable effort to bring together a wide range of officials and policymakers, to create the first integrated development plan for Malindi, and to establish land-use regulations. The Kenya Municipal Program (KMP) foremost supported the development of the current ISUDP. The KMP's main goals were to restructure urban management institutions and empower local governments; to support participatory urban development planning with focus on strategic planning and land use regulations; to invest in infrastructure; and to oversee and assess the projects and their implementation process (UN-Habitat 2015a, 3). Inevitably, the current ISUDP focuses intensively on land use regulations and strategies for infrastructure development.

It is undeniable that land use regulations are needed in Malindi, where recent tourism expansion, rapid urbanization, and lack of planning has led to many planning decisions that are weakening both urban and social fabric. Malindi is facing many challenges related to informal settlements, inadequate infrastructure, and environmental degradation, but the socioeconomic, cultural, and educational values must not be overlooked in the process of incrementally solving the condition of the urban environment. Furthermore, tourism rejuvenation can only be achieved with a radical shift in touristic strategy and a strong vision for the future (Butler 1980), and in order for Malindi to develop into a sustainable city, it is paramount to diversify its economy.

The current ISUDP also intended to create a vision for the future, but, perhaps given the overwhelming amount of pressing challenges that require immediate attention, and the county's lack of urban planning maturity, the current vision outcome is not more than a vague description of an idealistic generic image of the future. Malindi would benefit from investing time and resources into exploring possible future scenarios that ensure a sustainable impact of tourism on the local economy, and which would guide the strategic planning process towards developing a vision for the future that the local community will embrace with enthusiasm.

6.
STRATEGIC
PLANNING

7.
FUTURES
STUDIES

8.
SCENARIO
PLANNING

Following the conclusion of the previous section, this part discusses the shortcomings of traditional strategic planning and proposes scenario planning as a tool to steer strategic choices towards a compelling long-term vision. It also describes the methodology behind scenario planning.

PART THREE
THEORETICAL
FRAMEWORK

6. STRATEGIC PLANNING

“The future. . . does not just happen, but is consciously or unconsciously built.”
(Eleonora Masini, 1983)

A FRAMEWORK OF PLANNING PRACTICE

“Unpredictability in every field is the result of the conquest of the whole of the present world by scientific power.”
(Paul Valéry 1989, 71)

Blueprint planning is an inadequate tool to address present global challenges intensively marked by uncertainty. Our society is experiencing considerable developments: rapid technological advancements, production innovations, globalization of economy and culture, socio-demographic changes (such as women being more present in the labor market),

environmental changes (climate change, resource depletion, pollution, natural disasters), variations in economy, rapid urbanization (Albrechts 2010, 3; Albrechts 2015, 104). The worst global crises of 2018, as recorded by World Vision, were: violence, conflicts, civil wars, earthquakes and tsunamis, droughts, hunger and viral epidemics, economic crises, refugee crises, and mass migrations due to conflicts (World Vision 2018). Rapid, complex developments and crises effect uncertainty (Geissler and Kryz 2013, 38).

The future is uncertain, dynamic, and complex. The three aspects characterizing uncertainty are volatility (meaning that the future is unstable), complexity (the future is multidimensional), and ambiguity (the future is unknown) (Geissler

With a population of 8.5 billion people by 2030, we'll need...

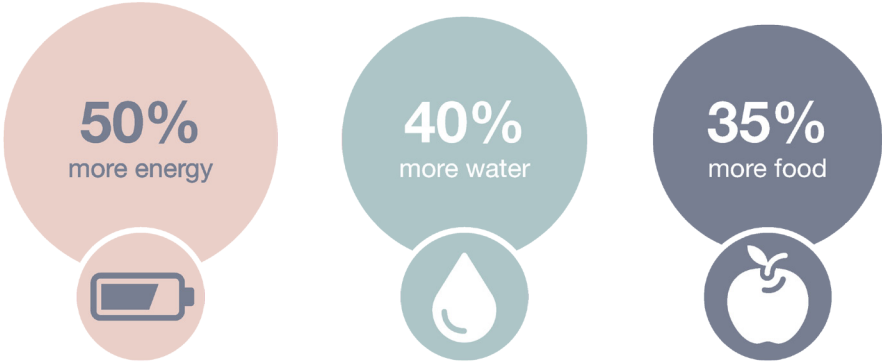


image 58. Global Trends 2030 (PcW 2016)

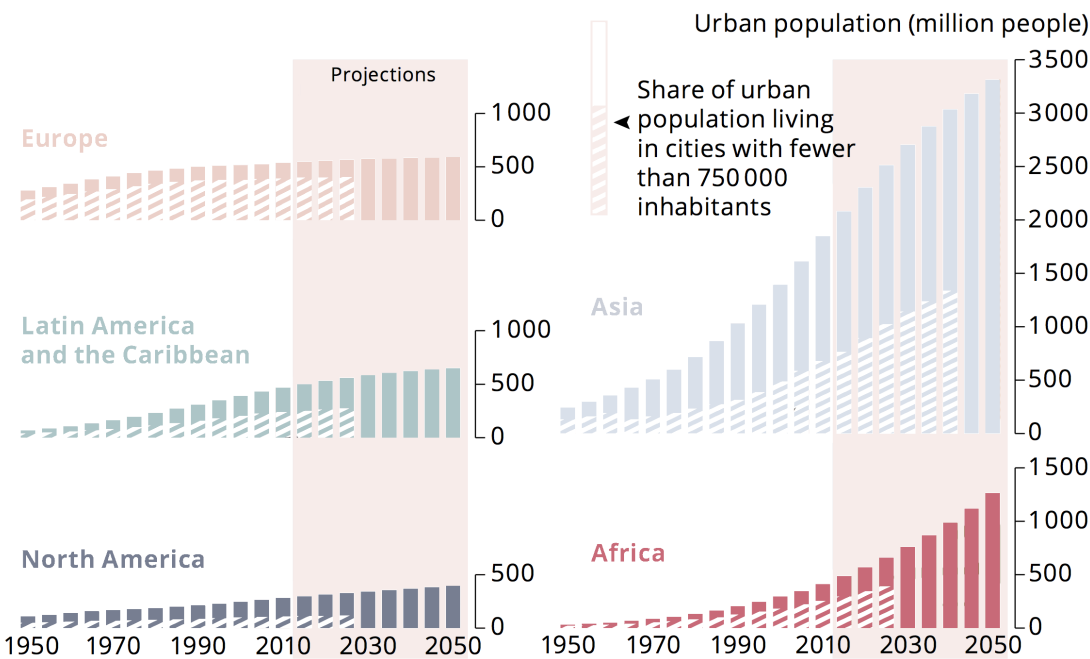


image 59. Urban Trends by World Regions, 1950-2050 (EEA 2015)

and Kyrs 2013, 23). Unpredictability has been associated with the advance of science and general knowledge, which has interfered with socio-ecological systems (Valéry 1989, 71) and has generated new forces of development. The most discussed global megatrends affecting societies are accelerated urbanization, global warming, depletion of resources, changes in global economic dominance, sociodemographic changes, and advancements in technology (EEA 2015; Retief et al. 2016; PwC 2016; PwC2018). In the last five years, Kenya experienced repeated political based terror attacks. Urban planning has the accentuated responsibility to account for complex futures, building resilience against uncertainty.

At the beginning of the twentieth century, traditional blueprint planning practices developed as a response to densification problems caused by rapid urban development (Albrechts 2017, 3).

The purpose of statutory planning was, and still is, land-use regulation and control (3). Regulatory plans are “static documents” that guide urban developments away from an undesired physical outcome through legal consequences.

In his article “Ingredients for a More Radical Planning,” Louis Albrechts (2015) criticizes the traditional planning practice, in the context of our dynamic world. He argues that statutory plans work well only under steady and predictable circumstances because they are primarily made to provide developers with land-use regulations and assurances. Moreover, regulatory plans are often unrealistic, because they are less based on analysis and studies of the existing conditions, and more on a desired, often utopian, vision of the future. Furthermore, traditional planning practice does not take into consideration the practical sides of implementation, such as existing resources, time limitations, or the community’s enthusiasm

to cooperate. It also does not acknowledge the possibility that the future might not unfold as planned, and therefore, when the future deviates from the planned outcome, or when the decision-making process takes longer than expected, statutory plans can rapidly become obsolete (Albrechts 2015, 105).

Regulatory plans are thus rendered incompatible with the dynamic and fast-progressing nature of our society. They perpetuate social order, but they do not seek to revolutionize it (Albrechts 2017, 4). They do not know how to operate within areas of uncertainty or instability, and nor do they include visionary ideas that would be able to tackle the “dynamics and tensions” of today’s changing world (Albrechts 2017). They focus on the static, regulatory side of planning, and the immediate issues to be addressed (1). Although unable to control what is being built (4), the role of blueprint planning is still important today because they protect areas of unwanted development that might be damaging to nature or cultural heritage and they inform landowners or investors on what to expect.

Albrechts (2017) emphasizes the need for planning practices to accommodate uncertainty, to accept that humanity’s aspirations are subject to change, and to take into account “multiple possible alternative futures” (Albrechts 2017, 2). Accounting for uncertain futures can be done by proposing action strategies that are developmental and adjustable, and that are based not only on theory and logic but also on observations and experience. He suggests the answer lies in strategic spatial planning because it has the capacity to answer the need for visionary planning and to face the shifting nature of our society.

THE STRATEGIC PLANNING
STARTING POINT

“The most successful strategies
are visions, not plans.”
(Mintzberg 1994, 107)

In his article about “The Rise and Fall of Strategic Planning” published in Harvard Business Review, Mintzberg (1994), defines strategic planning as the process of determining a strategy and making decisions in order to achieve that strategy (107). He writes that strategic planning is *analysis*, examining the process that leads to a specific goal and designing an action plan to enforce it, while strategic thinking is *synthesis*, envisioning a direction with the help of instinct and imagination (108). Mintzberg also describes the three roles the planners have: planners as strategy finders, who discover strategies and create visions; planners as analysts, who carry out analyses and study data; and planners as catalysts who encourage others to think creatively by raising questions (113). Therefore, it is understood that working in a team that includes all those types of planners brings strength to a project. Mintzberg’s article generally deals with the planning and management of organizations because strategic planning has its roots in business planning.

In the field of urban planning, strategic planning started to be used two decades later, with the awareness that “action alternatives are not good or bad per se, but their success is dependent on the results of the game that is played locally, regionally and globally” (Lapintie 2010, 605). In the early 1980s, strategic spatial planning was embraced as “the new hope” that would fill the deficiencies of statutory planning through producing coherent visions, advocating for “innovation and creative action” (Albrechts 2017, 4-6), instead of focusing

on formal, constraining regulatory plans (Healey 2007, 175). Strategic spatial planning responded to the need for planning an uncertain future with the use of analysis and technical knowledge (Balducci 2010, 55), which could not be achieved through traditional planning methods. It aimed to increase understanding, to address issues by extending the realm of possibilities, to stimulate aspirations through visionary thinking, to make arguments more persuasive by addressing community values, to assess existing information and create a realistic action strategy, and to challenge traditional methods and theories (Albrechts 2017, 6).

Healey (1997; 2004; 2007) describes strategic spatial planning as:

- a social mechanism which brings together a multidisciplinary assemblage of people mobilizing with the intent and desire to frame an operation course and to create actionable strategies that guide spatial transformations (Healey 1997a, 5);
- an opportunity to create new ideas and to develop a mechanism that can advance them (Healey 1997b, 21);
- responsive and intentional collective endeavor to redesign an urban area or a more extensive zone, and to generate action plans which organize the necessary processes relating to infrastructure development, protection of natural resources, zonification and land use regulations (Healey 2004, 46; Healey 2007, 23).

Healey (2007) also discusses the difference between strategic *thinking* and strategic *planning*. Following a specific strategic *planning* method, such as designing a mission statement, producing a “SWOT” analysis, developing a strong vision for the future, and outlining the steps that need to be taken in order to reach the desired vision,

can sometimes obstruct the visionary side that strategic *thinking* encompasses¹. Healey underlines that, in the field of urban planning, strategic *planning* is less valuable, and instead emphasis needs to be on strategic *thinking* combined with pragmatic action (Healey 2007, 171).

Strategic *thinking* is about exploring and generating visions and options. It is intuitive, synthesizing, creative, and inductive. Strategic *planning* is about assessing options, making decisions, taking action and getting things done (Conway 2003, 17). It is analytic, deductive and pragmatic. Through this synergy between “strategic thought and action” (Healey 2007, 171), strategic spatial planning has both “visionary and pragmatic dimensions” (Kunzmann 2010, 38).

CRITICISM

“How can we incorporate volatility, complexity
and uncertainty . . . into strategic planning?
How can we make strategies more flexible
and adaptive to changing environments?”
(Schwenker and Wulf 2013, 13)

The early approach to strategic spatial planning adopted the private sector planning structure. This planning practice can be seen as lacking creativity because it follows a pre-defined linear pattern going from agreement, dialogue, and analysis to vision, strategy, and action, and it has a “liner concept of time and space” (Balducci 2010, 55). Albrechts and Balducci (2013) argue that this type

1. Healey refers to Bryson’s strategic planning process as outlined in Strategic Planning for Public and Nonprofit Organizations. Bryson, J. 1995. Strategic Planning for Public and Nonprofit Organizations: A Guide to Strengthening and Sustaining Organizational Achievement. San Francisco: Jossey Bass.

of approach to strategic spatial planning follows an outdated attitude and structure, even though its purpose to create a compelling vision and its use of action strategies appear contemporary and innovative (18). Instead, they advocate for a more flexible attitude and an accessible approach to strategic planning which uses the important strategic elements without following a prescribed recipe. Albrechts and Balducci (2013) redefine strategic spatial planning as a transformative and integrative public-sector-led co-productive socio-spatial process through which visions or frames of reference, justification for coherent actions, and means for implementation are produced, that shape, frame and reframe what a place is and what it might become (Albrechts and Balducci 2013, 18).

Another criticism towards strategic spatial planning is that, while it answers situations of uncertainty, it still mostly looks towards a singular desired future (Schwenker and Wulf 2013, 13). One of the reasons this happens is because strategic planning often relies on forecasting singular projections of the future (Wulf et al. 2013, 44). Planning based on forecasting projections runs the risk of reaching a “self-fulfilling” rhythm (Börjeson et al. 2006, 726), which only perpetuates current trends. (This concept will be explained further in a later chapter). Forecasting also destroys visionary thinking (Wachs 2001, 369) and makes strategic planning slide into incremental planning, which focuses on short-term considerations and solutions that give quick and evident results. This direction is also criticized (Klosterman 2013, 162; Isserman 2014). Isserman (2014) argues that current planning practice lacks long-term vision because it focuses too much on finding solutions to current problems and pragmatism (9). Consequently, he urges planners to “learn how to think about the future” (Isserman 2014, 13).

Because strategic spatial planning was met with criticism (Albrechts 2017, 7), an alternative direction that followed naturally was practicing strategic planning as a complementing tool, used in parallel with statutory planning (Albrechts 2017; Albrechts and Balducci 2013). In the last decade, strategic spatial planning was used as “an active force in enabling change” (Albrechts and Balducci 2013, 19) by many major European cities in parallel to statutory planning (16). As examples, in 2007, Paris launched the “Grand Paris” project, aimed at creating a strategic development plan for Paris (JLL Grand Paris). The project started with a competition open to ten selected international planning teams which took place at the same time as the Paris Region Development and Urban Planning Institute was creating a new development master plan for Paris 2030: *Schéma Directeur de la Région Ile de France*, also known as SDRIF 2030.

A second alternative is hybrid planning, which integrates the two planning practices by allowing “the new mindset of strategic planning influence the statutory plan and the processes of its preparation and implementation” (Lapintie 2016, 5). This *hybrid planning* process is steered with the help of a compelling long-term vision which can be designed with the use of scenario planning.



image 60.

INTEGRATING SCENARIO PLANNING INTO STRATEGIC SPATIAL PLANNING

“The challenge is to find a systematic approach that provides a critical interpretation of the existing reality and incorporates (or involves) creative thinking about possible futures and how to get there.” (Albrechts 2010, 4)

The current strategic spatial planning practice requires developing a new direction. Cole (2001) recognizes the necessity for “more imaginative thinking about the future in urban planning” (372). Albrechts (2010) urges planners to determine a new methodical strategy that gives an analytical understanding of current trends and incorporates “creative effort to imagine structurally different futures” (4). Wulf et al. (2013) underline the need for “new instruments for strategic planning, . . . [which] must consider multiple plausible futures” (44). Isserman (2014) talks about planning losing its idealistic, visionary side, relinquishing its capacity to create compelling descriptions of possible, desirable futures and to stimulate creativity and motivation (9). Lapintie (2016) suggests a hybrid planning approach, which includes a compelling long-term vision to steer the planning process, designed by exploring alternative scenarios, and where “the plan itself can be made more flexible to ensure its resilience” (Lapintie 2016, 5).

In 1955, Meyerson and Banfield presented the planner as an expert that decides rationally between different possibilities and chooses the action that will have the outcome of maximum utility (Meyerson and Banfield 1955, 313). The planner was then a technically accomplished practitioner. The act of planning was understood

as a logical exercise of first analyzing the options and comparing the various consequences and impacts, and then coming to a conclusion (315-316). This description is perhaps an idealistic representation of the planning process as the planner will never have the capacity or the resources to research all the possible outcomes in detail in order to reach the optimal solution. However, the authors were aware of that. They described the concept of rationality as being a helpful notion for the planner rather than something that prescribes an exhaustive examination of every possibility (314). Six decades later, Isermann (2014) observes that planners are often “timid and ignorant of [their] heritage and tradition” (11), no longer daring to use strong, compelling visions for the future in their planning proposals (18).

Scenario-based strategic planning differs from traditional strategic planning approaches because it conceives alternative, plausible versions of the future. These visions provide a framework for developing and analyzing strategic choices which are to manage the different possibilities of spatial change. Scenario planning accounts for uncertainty and unpredictability, granting planners the possibility to manage complex, multidimensional, unstable futures more efficiently through strategic action. Anticipating plausible versions of the future gives planners the possibility to be receptive to change and be ready to react with appropriate choices (Wulf et al. 2013, 46)¹.

Scenario planning is bringing back the comprehensive approach to planning as it tries to tackle the current volatile environment.

1. See also:
Porter, ME. 1985. *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: The Free Press.
van der Heijden, K. 2005. *Scenarios: The Art of Strategic Conversation*. Chichester: Wiley.

7. FUTURES STUDIES

“All our knowledge is about the past, but all our decisions are about the future”
(Maree Conway, 2003)

FUTURES STUDIES

“The future is ancient:
prophecy, forecasting and foresight
are as old as recorded human history.”
(Godhe and Goode 2018, 151)

Futures studies, also known as *futures-thinking* or *futurology*, is the multidisciplinary study that tries to understand and influence the future (Cole 2001, 374) through researching the dynamics and drivers of change (Giaoutzi and Sapio 2013, 3). Futures studies examines “the possibility, probability and desirability of change” (Schwenker and Wulf 2013, 37) with the intent to methodically search, discover, develop, evaluate, and propose possible, probable, and preferable futures (Bell 1997, 42; Giaoutzi and Sapio 2013, 4). It uses scientific reasoning and methods in order to comprehend and be able to explain the relationship between decisions and change, to establish what can be changed, and to understand what can be prevented or advanced (Bell 1997, 45).

Futurology studies diversified long-term alternative images of the future. It emerged as an academic discipline after World War II as a response to the need to avoid catastrophic events in a fast-changing and complex world (Cole 2001, 375; Godhe and Goode 2018, 152). It aims to direct the society towards a better future. Futures studies implicates broadening

our alternatives as it involves viewing present obstacles as opportunities and seeks to make present constraints surpass-able (Bell 1997, 42).

Futures studies as a field of practice diffuses into many different approaches and methods. Literature offers various classifications of methods and terminology, but most generally two terms are used to describe two different directions futures studies can take, based on the use of quantitative or qualitative methods: *forecasting* and *foresight*.

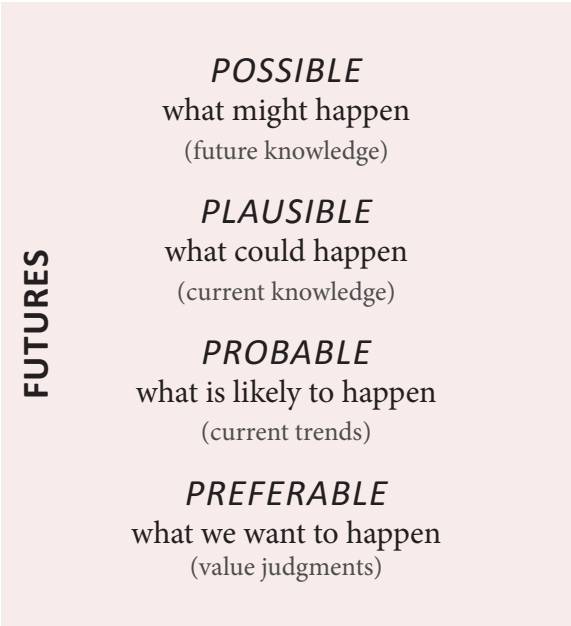


image 61. Types of Futures (Conway 2003)

FORECASTING is an analytical futurology method that aims at predicting the future by analyzing and projecting current trends (Wachs 2001, 369; Cole 2001, 376). In forecasting, the future is singular, successive, decided, and develops as a subsequence of the past and present events (Fernández Güell and Collado 2014, 83). Therefore, forecasting is often explored through extrapolations techniques. Extrapolation uses data from past and present trends to calculate and estimate growth, decline or consequence (Schwenker and Wulf 2013, 37). Extrapolations are done with the use of large amounts of data, mathematical equations, and computer calculations, giving forecasts a false impression of accuracy because they are developed with the use of scientific methods (Wachs 2001, 369-370). In reality, forecasts always rely on assumptions about the future (Kloasterman 2013, 163), such as the assumption that a specific trend will not change. Forecasting is therefore efficient at predicting the future only in a stable environment, and ineffective in an uncertain world (Schwenker and Wulf 2013, 37; Khakee 2010, 216). Forecasting is not strategic; it does not offer options or alternatives; it is only projecting “the ‘same old system’” (Mäntysalo and Grišakov 2017, 352).

Nevertheless, forecasting still has a close relationship to planning, because planning is often done as a reaction to forecasts that predict upcoming crises (Wachs 2001, 369). For example, if a forecast predicts an increase in urbanization and a lack of housing supply, planners will try to accommodate the predicted urban population growth by increasing housing. However, Isserman (2014) challenges this connection between forecasts and planning, explaining that, when planners focus only on responding to trend projections and extrapolations, their role as visionaries is diminished (10). Planners must not forget that their work influences the future.

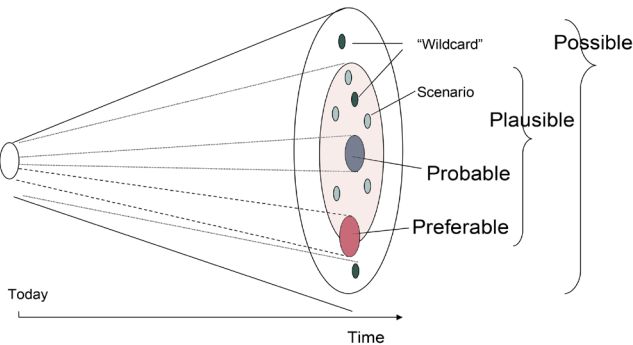


image 62. Types of Futures (Conway 2003)

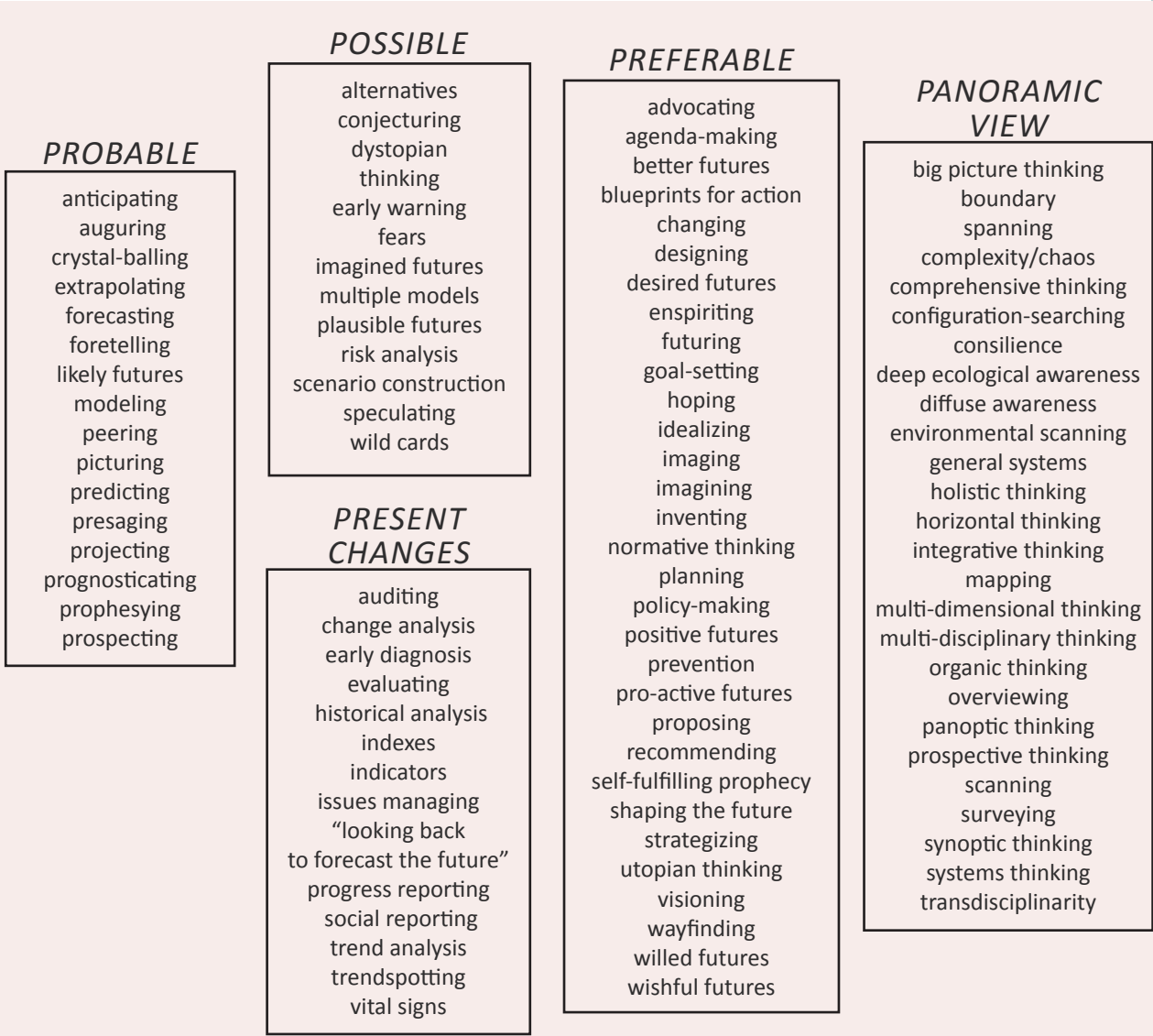
Furthermore, when forecasts influence planning, and interventions are made to accommodate a predicted future crisis, it is no longer possible to assess if the initial forecast was accurate, and the predicted crisis would have happened without the interventions. Forecasts are thus difficult to validate. Wachs (2001) explains how this impossibility to confirm their accuracy leads to a “blatant abuse” of forecasting by policymakers who advocate for their desired interventions with the use of forecasts which have the power to influence decision makers (369-370). A proposal for increased housing is more inclined to be developed when planners can show an overwhelming future need for it.

Therefore, forecasts run the risk of falling into a “self-fulfilling” cycle (Börjeson et al. 2006, 726): predicted urbanization growth may lead to building more housing, which, in turn, will stimulate an increase of population. Self-fulfilling predictions perpetuate current trends, making it harder to abandon. Isserman (2014) argues that successful forecasting in the field of urban planning includes mixing artistic, creative, and visionary ideas with calculated knowledge and scientific research (13).

image 63. Purposive Categories of Futures - Thinking (Marinen 2002)

FORESIGHT is a futures studies process that begins from the understanding that the future is not singular, but complex, alternative, ambiguous and open. Foresight is not predicting the future, but visualizing plausible futures. “Foresight is systematic thinking about the future” (Demos Helsinki 2018, 16), a strategic *thinking* process (intuitive, synthesizing, creative, inductive), not a strategic *planning* process. It involves exploring and generating alternatives (“what might we need to do?”), not actions (“what will we do?” or “how

will we do it?”) (Conway 2003, 17-18). Foresight can have an *analytical* approach, evaluating possible ramifications of decisions made in the present; a *normative* approach, searching to envision a specific desired future and the pathway to it; a *planning* approach, proactively evaluating the effects of present choices leading to a desirable future; or a *communicative* approach, building knowledge on what might trigger a possible future (Lüdeke 2013, 58; Conway 2003, 16).



Another way to sort out futures studies is based on their purpose: probable futures, possible futures, preferable futures, present changes, panoramic view, and studies that question all the others (Marinen 2002, 269-272).

FORESIGHT METHODS AND TECHNIQUES

“To build a future means linking the knowledge of the past and present to choice and action.”
(Bertrand de Jouvenel 1964)

There is a wide range of approaches and techniques used by futures studies, applying various methods and mixing qualitative and quantitative approaches. The futures described through these methods can thus vary, from reflective artistic narrations to socioeconomic calculations (Khakee 2010, 209). Jan-Erik and Hanne Karlsen (2013) explain that often quantitative methods are used to demonstrate qualitative depictions of the future because using analytic methods gives foresight more authority; or, the opposite, qualitative, narrative methods are used to describe quantitative studies (28).

All the various methods in foresight studies rely on reflective meditation for gaining understanding about the elements that influence the outcome of history. However, the methods used can be quite varied: subjective or objective, using analysis or imagination and intuition. Therefore, the result can also be diverse, dependent on the experience of the futurologist (Giaoutzi and Sapio 2013, 4). Moreover, foresight cannot be verified in the present, but only after a particular time has passed (Karlsen and Karlsen 2013, 48; Wachs 2001, 369). For this reason, foresight studies cannot be evaluated as science.

Karlsen and Karlsen (2013) describe a classification of foresight methodologies as *foreseeing, managing* and *creating* (38)¹.

- **FORESEEING** assumes that the future can be predicted, or seen in advance, and that the future is inevitable, but that we can prepare for it (Karlsen and Karlsen 2013, 38). Foreseeing methods are either highly subjective methods or highly analytical ones.
- **MANAGING** methods assume that the future is unpredictable, and therefore focus on regulating change through proactive action, such as strategic planning, or through reactive action, such as crisis management (38).
- **CREATING** methods assume that the future only exists once it is created by our actions, and focuses on proactive choices based on a desired future (38-39).

SCENARIO PLANNING is a foresight method used for exploring an uncertain future by analyzing multiple, alternative futures through mixing qualitative and quantitative approaches.

BACKCASTING is a foresight technique that starts with identifying the desired scenario and working back towards the present, thus finding development paths that would lead to the desired future (Karlsen and Karlsen 2013, 37). The role of backcasting is to pinpoint the strategic decisions and steps that need to be taken in order to reach the desired future scenario. Backcasting connects opportunities and competences that exist in the present with needed future interventions that lead to the desired outcome, in the search to find out *how* the future can be influenced or *who* can influence the future (Neuvonen and Ache 2017, 77).

1. This classification was proposed in 1996 Graham May. May, Graham H. 1996. The Future is Ours: Foreseeing, Managing and Creating the Future. Westport/ London: Praeger/ Adamantine.

DIFFERENCES BETWEEN PLANNING AND FUTURES STUDIES

	FUTURES STUDIES	PLANNING	COMMENTS
Output	Background and context for decisions	Set of decisions	The result of the futures studies exercise can serve as input for planning.
Extent of detail	Relatively undetailed	Fairly detailed	This substantial difference can also work as an advantage if futures studies and planning are used complementing each other.
Organizational location	Usually outside the policy making organizational setting	Within the policy making organizational setting	Leaving both foresight and planning to the same group of people can result in routine procedures, but they can be integrated mixing internal analysts and external collaborators.
Time element	Relatively unlimited	Relatively limited	When results from futures studies are used as input for planning, foresight exercise must be timed to serve the planning process.
Involvement in power struggle	Low involvement	High involvement	Khakee argues that it is preferable to engage policy-makers in foresight processes.
Time-span	Usually beyond 10 years	Up to 5-10 years	Although foresight usually explores the long-term future while planning accounts for the short-term future, foresight can be organized to consider shorter periods that match the planning timeline.
Techniques	Mainly methods involving imagination, intuition and tacit knowledge	Mainly data-based, rigorous, analytical and quantitative techniques	Shani describes foresight relying primarily on intuition and tacit knowledge, as opposed to planning using analytical, quantitative methods, but Khakee argues that this is not the case. Foresight frequently mixes data analysis with intuition, and respectively, planning also incorporates tacit knowledge and qualitative data.
Mode of publication	Public, occasionally internal	Internal, occasionally public	Efficient citizen involvement is imperative to both foresight and planning.
Evaluation	Mainly based on anticipation	Mainly based on performance	Foresights are impossible to validate or evaluate, but they could be assessed based on the influence they have on planning.

image 64. Differences Between Planning and Futures Studies (based on Shani 1974 and Khakee 2010)

CONNECTING FUTURES STUDIES TO URBAN PLANNING

“Futures studies make decision-makers aware of the great variety of possibilities lying ahead. This is, after all, what good planning is all about.” (Khakee 2010, 217)

It is interesting to discover literature that discusses the similarities and differences between foresight and planning, linking them together (Shani 1974; Khakee 1991; Cole 2001; Khakee 2010; Fernández-Güell and Redondo 2012; Fernández-Güell and Collado 2014). Cole (2001) writes that both futures studies and planning are optimistic processes that attempt to preserve the future and protect the people’s wellbeing, and therefore they “follow parallel and sometimes overlapping paths” (372). Khakee (2010) explains that futures studies and planning complement each other (210). This view was already suggested by Shani in 1974¹.

Although strategic planning and futurology are different, independent processes, there is a noticeable connection between the two (Khakee 2010, 210), “an essential symbiosis” (Cole 2001, 373) which is a good basis for collaboration. Firstly, there are many similarities between the two fields. Both planning and future studies combine quantitative and qualitative data, mixing analysis with imagination and intuition. They both seek to support the ideal future and to prevent liabilities. They work with issues that can be inconclusive, versatile, and sometimes even contradictory. Their results are complex and unpredictable. Moreover, both practices face “ethical dilemmas” associated with making the

1. Shani, Moshe. 1974. “Futures studies versus planning.” Omega, International Journal of Management Sciences, 2 no 5: 635–649.

right decisions in terms of prioritizing the right information or methods. Moreover, manifestly, the representation or narration of the desired vision can shape the decision of the stakeholders and influence the future.

There are of course also many differences between the two practices, but differences can also be seen as “an opportunity for enriching these overlapping fields” (Cole 2001, 373). As an example, the result of a foresight exercise is knowledge, based on which decisions that are made in the present can be evaluated (Bell 1997; Khakee 2010). It differs from the outcome of planning, but it can be used as a starting point in planning.

REFLECTION

Present global challenges marked by complexity and uncertainty make traditional blueprint planning inadequate to urban planners (Avin and Dember 2001; Albrechts 2010). Foresight methods can help overcome current challenges. Strategic development planning that bases proposals and action strategies on a compelling long-term vision of the future, not merely offering incremental planning strategies, must study and recognize the possible, alternative future (Fernández Güell and Redondo 2012, 318). The synergistic connection between futurology and strategic planning makes a good argument for the use of foresight methods in urban planning.

8. SCENARIO PLANNING

Scenario planning is the methodical thinking of the unthinkable. . . . It assumes that there will never be enough information on which to base a decision, if that decision requires certainty about the future. Therefore, it is important to prepare a wide range of possible decisions based on an entire range of possible futures. Never being wrong about the future is better than occasionally being exactly right.
(Garreau 1995)

WHAT IS SCENARIO PLANNING?

“Scenario planning is best described as a way of thinking about the future without trying to predict it.”
(Hopkins and Zapata 2007, 9)

Scenario planning is a strategic planning method of using scenarios to anticipate, describe, and analyze plausible visions of the future in order to help make appropriate choices in the present (Schwartz 2012, 20-22; Wulf et al. 2013, 46). Scenario planning is about identifying and narrating new prospects, challenging extrapolations and suppositions, and identifying decisive drivers of change that remain unpredictable (Mäntysalo and Grišakov 2017, 50).

Scenario planning tries to uncover *what might happen*, which is done by identifying, exposing, and managing elements that have the power to create change. It differs from *vision making* because it does not look for a specific, desired future (Avin and Dembner 2001, 22); instead, it explores plausible futures. Scenario planning is also not aimed at predicting the future, nor even at finding the most probable future (Schoemaker 1991, 550). Scenario making recognizes that a rational-comprehensive analysis and understanding of the future is simply impossible

to achieve unless perhaps only a limited situation within a constrained environment is examined. Instead, scenario making involves a “semi-rational” analysis which also uses tacit knowledge, imagination, and intuition. It is this mix of rational analysis and instinct that makes it possible for complex situations to be analyzed (551). Scenario-making aims at managing complex, uncertain situations by offering a sense of orientation, not a defined solution.

Scenario planning recognizes futures that are possible, yet uncertain, tries to identify the pathways that lead to those different futures, and supports the strategic decisions made in the present which are more likely to succeed (Wulf et al. 2013; Schwartz 2012; Manson 1999). Making successful choices in the present starts with accepting that it is impossible to know or to predict the actual future, and resolves to discern that strategic decisions are powerful when they have a positive impact across various possible future scenarios (Wilkinson 1995). In *The Art of the Long View*, Peter Schwartz writes that scenarios are “vehicles for helping people learn” and are most potent when they encourage planners to not only look at what might happen in the future, but also to explore what the implications of those possibilities are (Schwartz 2012, 22-24).

Scenario planning has roots in military planning (Schwartz 2012, 23-26) (Manson 1999) and was later embraced by business planning in the 1970s. The first success story was that of the Shell Oil company having a favorable response to the 1970s oil crisis, due to quickly made decisions that were designed earlier with the help scenario planning (Avin and Dembner 2001, 23; Schwartz 2012, 26-27). Today scenario planning is a method frequently used in business because it tries to determine the repercussions of critical situations and the possible results determined by alternative decisions (Gössling and Scott 2012, 773).

In the urban planning field, the traditional (and still most common) approach to scenario

planning involves stakeholders selecting their preferred scenario (Hopkins and Zapata 2007, 9-10; Avin and Dembner 2001, 26). This practice differs from *vision making* because the desired scenario is not “agreed upon upfront” (26); instead, it is selected from multiple, possible future scenarios. In practice, this urban planning scenario making method is used to confront uncertainties simultaneously taking into account possibilities, development potential and desired outcome (Albrechts 2010, 10). The concept is that we can create the future we want by making the necessary choices that lead us there (6). Scenario planning is thus used with purpose and intention, with the preconception that the future can, and should, be controlled.

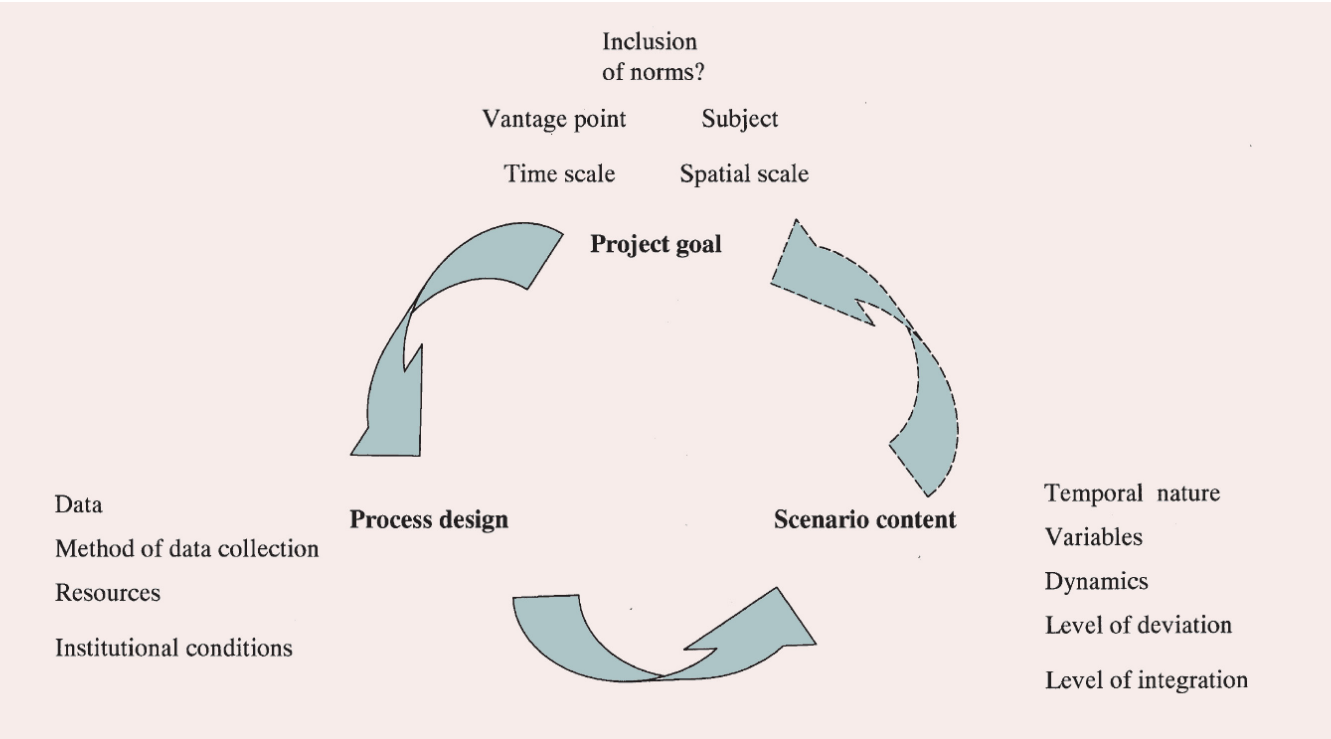


image 65. Scenario Typology in Brief (van Notten et al. 2003)

DECIDING SCENARIO
TYPOLOGY

“Our imagination possesses the ability to escape mentally from established patterns of thinking, and it makes us keep exploring and connecting our thoughts.” (Albrechts 2010, 12)

Futures studies as a field of practice diffuses into many different approaches and methods, and has therefore been described as “fuzzy multi-field” (Marinen 2002, 263). Classifying scenario planning processes into typologies helps apprehend the scenario planning practice better, and creates a structure that makes strategic choices more methodical and efficient (Chakraborty and McMillan 2015, 19). It also helps to extend the field of future studies further.

The literature on scenario planning offers various classifications, but most of them are designed for the private business sector. An early comprehensive scenario typology is explained by Ducot and Lubben’s 1980 article “A typology for scenarios” with the help three axes. The first axis ranges from *exploratory* scenarios (looking at the effects of specific causes) to *anticipatory* scenarios (looking at the causes of specific effects) (51). The second axis ranges from *descriptive* scenarios (looking at what can happen) to *normative* scenarios (looking at what is desired to happen) (52). Together they create a matrix which can be expanded into a cubic system, by adding a third axis exploring the level of *probability* (54). Van Notten et al. (2003) offer a new restructuring by looking at scenarios from three perspectives: the context, the goal, and the design process. Most of the early scenario classifications focus on scenario building in the private business sector.

Chakraborty and McMillan’s (2015) list of nine key decisions that establish the parameters of scenario planning (22-23) is perhaps the most comprehensive scenario typology specifically aimed at urban planning practice. Chakraborty and McMillan also call these nine key decisions “components” (Chakraborty and McMillan 2015, 21), because together they construct the final scenario typology (25). A structured way to look at these nine components is to organize them into “context,” “primary decisions” and “secondary decisions” (25).

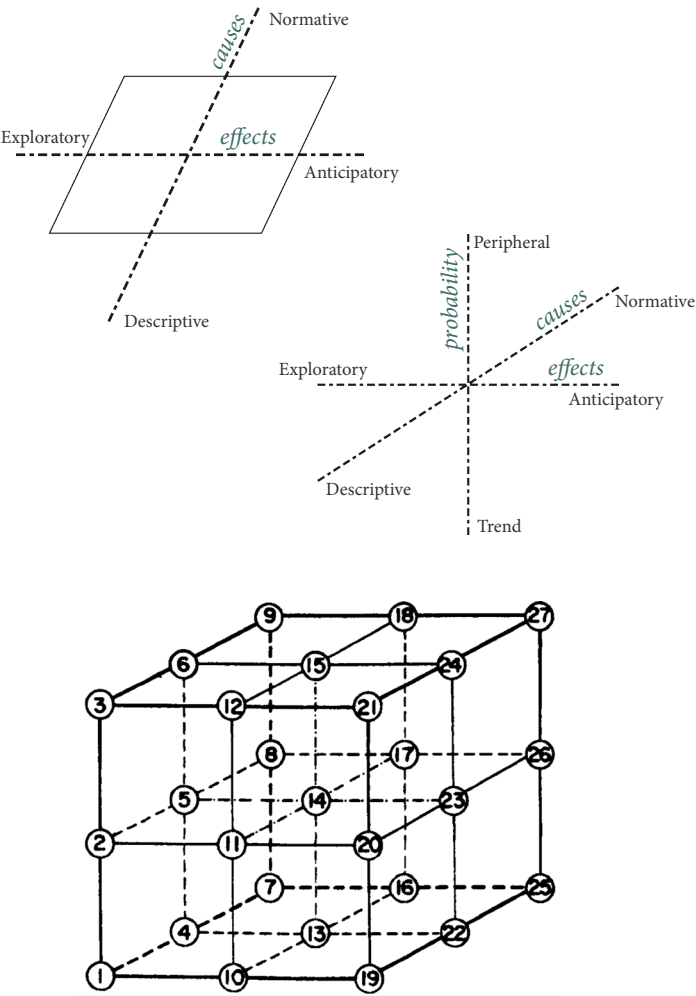


image 66. Ducot and Lubben Scenario Typology (1980)

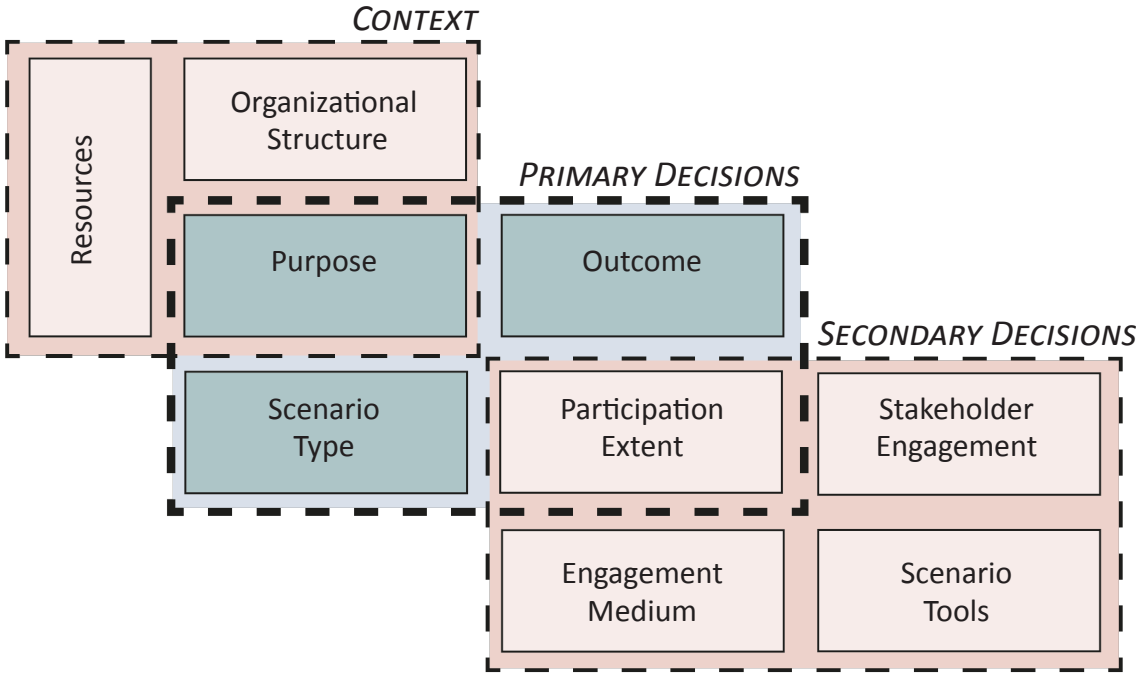


image 67. Scenario Planning Components (Chakraborty and McMillan 2005)

CONTEXT

The first scenario components frame the *context* of the planning exercise (Chakraborty and McMillan 2015, 25). The least flexible decisions here are establishing the *organizational structure* and recognizing the *available resources*. The scenario planning exercise could be done by a single agency, or multiple organizations (21). Funding can be an essential element in establishing resources because limited funding will also limit the time and depth of the project (23).

PRIMARY DECISIONS

Primary decisions are about the *purpose* of the project, the *scenario type* and the desired *outcome* of the project; and they usually help recognize the most suitable approaches and methods to be used as the project unfolds (Chakraborty and McMillan 2015, 25). They are the most important parts of designing the scenario typology. The

aim of the scenario planning exercise could be to explore a single specific topic, to cover multiple issues with the help of a comprehensive project, and to focus on solving a specific challenge (21). The desired outcome can be about raising awareness, recommending policy, and creating a shared vision (22).

The *scenario type* widely describes the general reason for developing scenarios. It is most straightforward explained by Börjeson et al. (2006) who divide scenarios into three categories: *predictive*, *normative*, and *explorative*. Their classification separates scenarios with the help of three different questions that relate to the probable, possible and preferable versions of the future: “What will happen?”, “What can happen?” and “How can a specific target be reached?” (Börjeson et al. 2006, 725-730).

SECONDARY DECISIONS

Lastly, secondary components discuss decisions such as the *stakeholder engagement*, the *participation extent*, the *medium of engagement* and the tools used for building and analyzing scenarios. Secondary decisions usually form within the framework created by the context of the project and the primary decisions which have already been made (Chakraborty and McMillan 2015, 25). A project’s stakeholders can be the public, the government, and private interest groups (22). Scenarios can be aimed at merely informing the participants about alternative futures and consequences, or at sharing knowledge and receiving feedback (23). They can also be designed as participatory exercises. The tools for constructing and analyzing scenarios can be qualitative or quantitative.

SCENARIO TYPOLOGY

What will happen?
What can happen?
How can a specific target be reached?

PREDICTIVE SCENARIOS explore probable futures, and are the response to the question “What will happen?” (Börjeson et al. 2006, 726). Predictive scenarios can be *forecasts*, attempting to understand the most probable consequence of present tendencies, or “*what-if*” scenarios, exploring what is most likely to happen if a specific event unfolds or a specific condition is met (726). Predictive scenarios are most efficiently used when exploring the near future, where the level of uncertainty is limited, and can, therefore, be a useful tool in incremental planning practices. It is important to note that it can be problematic to adjust an unwanted trend when operating with predictive scenarios because predictive scenarios preserve past and present trends.

NORMATIVE SCENARIOS explore preferable futures, and are the response to the question “How can a specific target be reached?” (Börjeson et al. 2006, 728). When the desired future can be reached without fundamental changes that affect the system structure, the scenario is a *preserving scenario*. Alternatively, a *transforming scenario* presents a desired future that can only be achieved by making fundamental changes in the system structure (728). Transformative scenarios need to be open to new understanding, to acknowledge and approve new plans of action, to be willing to adapt, and to “accept the need and opportunity for change” (Albrechts 2010, 10). Normative scenarios are characterized by “intentionality” and “purposeful effectuality” (Ducot and Lubben 1980, 51). This implies deliberate choice in the process of assessing the current situation, formulating an opinion, and making decisions that lead to pre-designed outcomes; as well as selecting the most relevant resources and mechanisms to face and deal with the intended future (Albrechts 2010, 11).

Normative scenarios have been used in urban strategic spatial planning to decide, cause, and control a particular future. Connecting desired futures to the present is done through *backcasting*, working backward and searching for pathways to reach the preferred scenario. Backcasting seeks to answer questions such as “Who can influence change?” and “How can change be achieved?” which connect the present to the desired future (Neuvonen and Ache 2017, 77). *Backcasting* is considered a strong and effective tool in navigating towards a preferred future scenario. However, backcasting could also lead to making extravagant decisions in the present, in order to reach the desired future target (Börjeson et al. 2006, 729). Large investments might seem sensible choices when building towards a specific vision of the future, but since normative scenarios

explore long-term futures, with time, the desired scenario might change, either voluntarily, or involuntarily (affected by “wild card” or “black swan” events). Therefore, *backcasting* needs to be used with caution.

EXPLORATIVE SCENARIOS explore possible futures, and are the response to the question “What can happen?” (Börjeson et al. 2006, 727). Börjeson et al. divide explorative scenarios in *external scenarios*, which explore possible futures influenced by external factors, and *strategic scenarios*, which describe the outcome of internal decisions. Explorative scenarios differ from what-if scenarios because they are built with the future as the starting point, not the present trends. Moreover, they explore the far future, which can be more uncertain and produce greater change (727). What is most specific about explorative

scenarios is that they do not focus on one desired future, but instead explore multiple, alternative futures. Therefore, explorative scenarios are most efficient in situations dealing with high uncertainty. They aim to reveal the most robust decisions, resulting in positive outcomes across various possible future scenarios. Explorative scenarios encourage the capability to adapt to changing situations through building “strategic resilience”¹.

Scenario typologies help planners have a better understanding of the complex scenario planning process, which, in turn, makes scenario planning more efficient.

1. Geissler and Kryss (2013) describe strategic resilience as “the ability to reinvent . . . models and strategies when conditions and circumstances change” (Geissler and Kryss 2013b, 200).

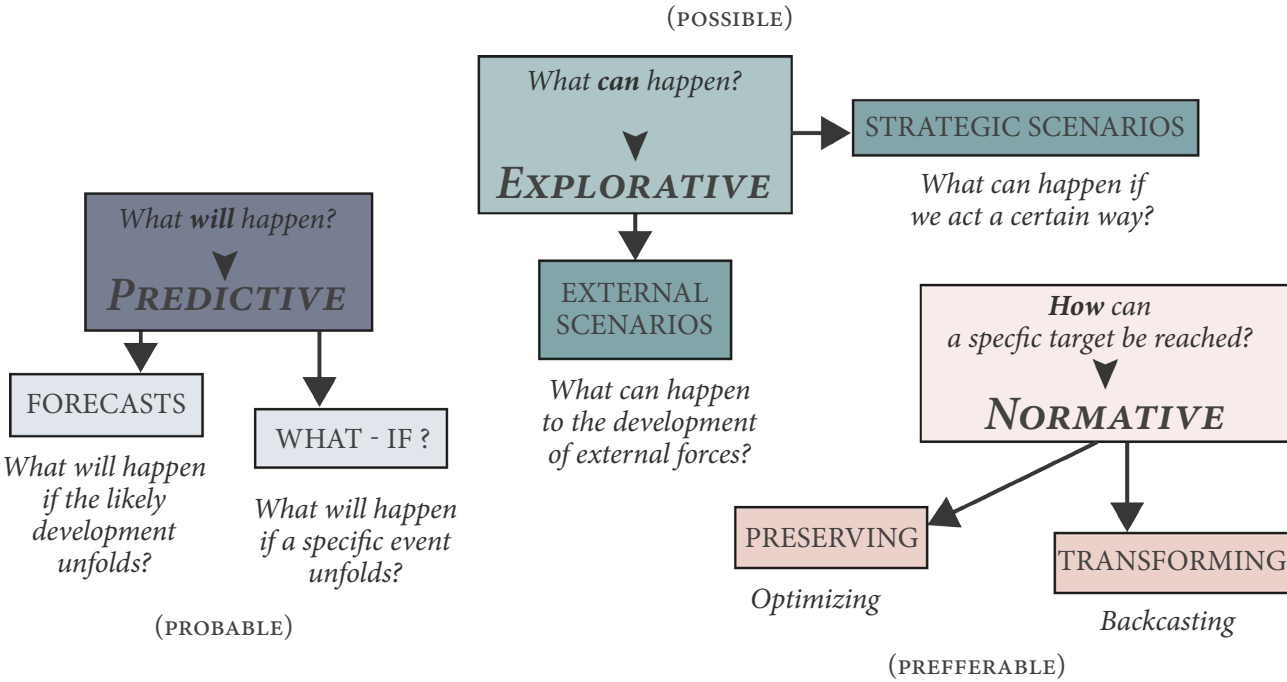


image 68. Scenario Typology (own image)

HOW TO BUILD SCENARIOS

“[Scenarios] are descriptions of possible futures that reflect different perspectives on the past, the present and the future”
(van Notten et al. 2003, 424).

Scenario planning has been frequently celebrated in the business world because of the success which organizations have had with it. Nevertheless, it is practiced without a standardized holistic model of practice (Keough and Shanahan 2008, 167). In 2015, Chakraborty and McMillan studied 83 various scenario-making projects dealing with land and infrastructure planning, and created a list of 21 scenario method components that are used in scenario planning projects (Chakraborty and McMillan 2015, 21).

SCENARIO-PLANNING COMPONENTS

1. Goals	12. Scenario types
2. Area of focus	13. Number of
3. Spatial extent	scenarios
4. Geographic context	14. Funding source
5. Exercise timeframe	15. Commissioned by
6. Planning horizon	16. Lead agency
7. Scenario inputs	17. Resources
8. Technical approach	constraints
9. Tools used	18. Agency types
10. Stakeholder	19. Agency affiliations
engagement	20. Participants
11. Scenario	by expertise
construction	21. Participation by
approach	affiliation

image 69. Chakraborty and McMillan’s List of Preliminary Components (Chakraborty and McMillan 2005)

The foremost phase of scenario planning is determining if scenario planning is indeed relevant, advantageous, and effective (Keough and Shanahan 2008, 168). There are both external and internal factors which influence feasibility. Schoemaker (1991) lists the *external factors* (550):

- high uncertainty about the future;
- frequent high-impact discontinuities;
- insufficient evident opportunities;
- strategic planning took over strategic thinking, focusing more on incremental planning than vision making;
- significant change is likely to happen;
- heterogeneous community reflecting different views an opinions;
- an aspiration for finding a common framework;
- competitors using scenario planning.

There are also softer, *internal factors* that can lead to a favorable outcome of scenario planning: the policymakers and stakeholder’s willingness to participate in scenario planning (Keough and Shanahan 2008, 168-169) or the presence of a medium- to long-term timeline (Keough and Shanahan 2008,168; Avin and Dembner 2001, 27).

The second phase of scenario planning is the setup process: defining the area of planning, analyzing the current situation (such as the context, the main attributes of the study areas, the current trends and influencing events), and defining the time boundaries, reviewing the data and the resources, identifying the stakeholders and planning teams (Keough and Shanahan 2008, 169; Özkaynak 2010, 361). The third phase in scenario planning is scenario building.

In his reference book, *The Art of the Long View*, originally published in 1991, Peter Schwartz talks about scenarios as scripts, or stories, that are created to understand uncertainties better and to recognize how the world might present itself

in the future (Schwartz 2012, 20-22). Scenario planning then is a method of using scenarios to describe futures in order to help make appropriate choices in the present.

Within this context of scenario planning, Schwartz describes scenarios as instruments that help us organize our understanding of different possible future settings, systematize how our choices unfold, and influence those possible futures. Scenarios are a series of systematized approaches that allow us to be efficient at visualizing contingencies (Schwartz 2012, 20-22).

Schoemaker (1991) describes scenarios as an instrument for both judging and exchanging ideas (551). He writes that efficient scenarios must also emphasize the pathways of reaching potential outcomes, not only depict them. Scenarios must study a wide range of directions and perspectives, and therefore explore a generous amount of contingencies (550).

At the end of *The Art of the Long View*, Schwartz gives a detailed appendix on eight steps to building scenarios. His method was later used

and refined¹ by many practitioners in different fields.

Because there are boundless scenarios that can be written about the future, the first step in scenario building is identifying the *focal question* (Wilkinson 1995) through recognizing the decisions that need to be made which would have long-term consequences (Schwartz 2012, 258-259). The next steps are determining the factors that influence the *focal question*; followed by identifying *driving forces*, which are variable elements that have the capacity to stimulate substantial modifications, and to provoke divergences from present tendencies (Özkaynak 2010, 361); and to classifying them based on significance and uncertainty (Schwartz 2012, 259-260; Wilkinson 1995).

1. As examples:
- in 1993, Paul Schoemaker described a 10 steps method in his “Multiple Scenario Development” article in Strategic Management Journal.
- in their 2001 article, “Getting Scenario Planning Right”, Avin and Dembner presented a 12 steps process for applying scenario planning in urban planning.

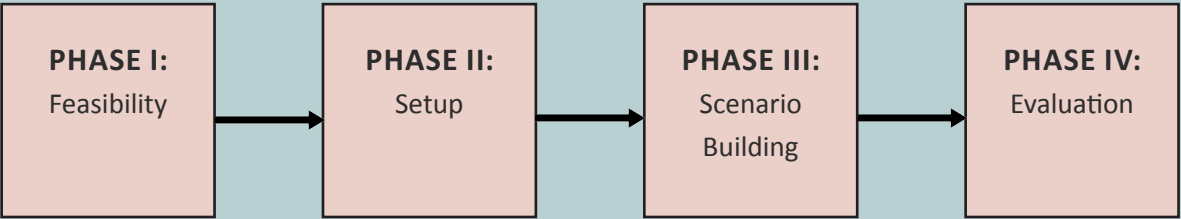


image 70. Scenario Planning Process (own image)

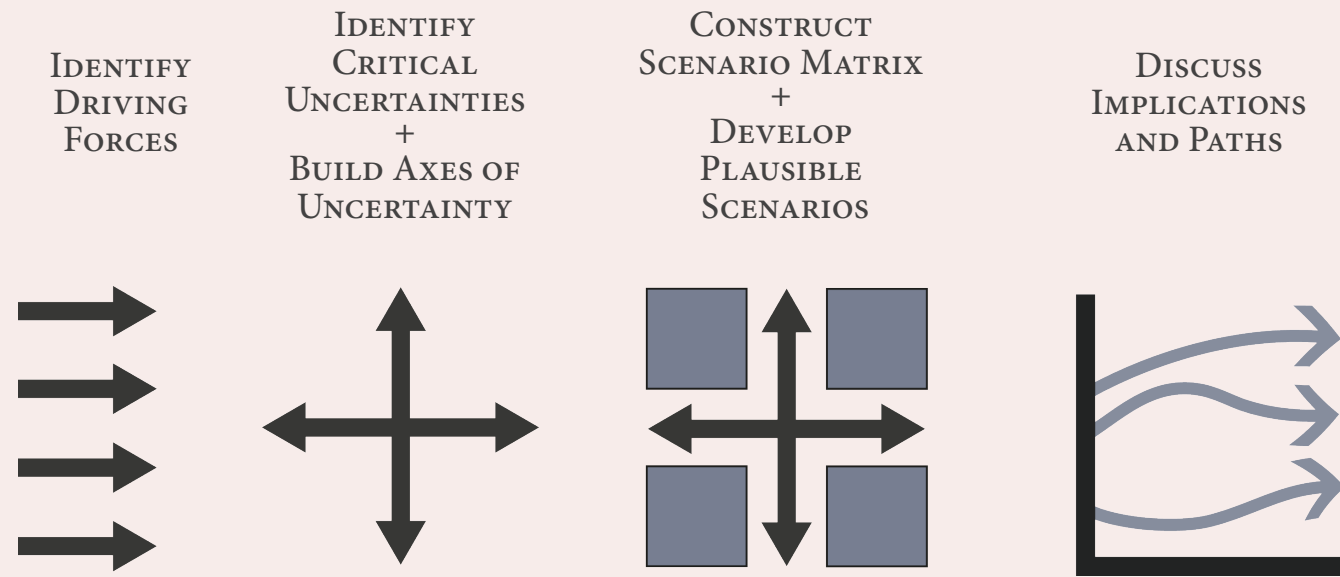


image 71. Phase III: Building Scenarios (own image)

DRIVING FORCES: PREDETERMINED ELEMENTS AND CRITICAL UNCERTAINTIES

“Driving forces, predetermined elements, and critical uncertainties give structure in our exploration of the future.”
(Schwartz 1991, 123)

DRIVING FORCES, also known as *drivers of change*, are the variable components that shape the narrative of a scenario, the essential elements or series of actions that bring significant impact on the current environment, “dominate the dynamics of the whole system” (Özkaynak 2010, 361), and determine the outcome of events (Schwartz 1991, 106). Identifying the drivers of change is an essential part of scenario planning. They enable the creation of consistent, plausible scenarios (Wulf et al. 2013, 48) through sharpening the primary perception, intuition, and awareness which helps in determining which elements are relative and which are most critical (Schwartz 1991, 107).

A practical approach to recognizing *driving forces* is scanning through different categories of processes (Schwartz 1991, 110-113; Wilkinson 1995; Avin and Dembner 2001, 23; Özkaynak 2010, 361):

- *Socio-cultural*: demographic, such as population growth, sex, level of education; ethnographic; values, lifestyle, wellbeing, religion, heritage;
- *Technological*: existence, availability, and development of technology; efficiency;
- *Economic*: economic growth, income distribution, sufficiency of capital for investments;
- *Environmental*: energy, pollution, climate change, strain on ecosystems;
- *Political*: legislation, political stability, political activity;

This method of identifying drivers of change is also known as the STEEP method (the acronym of the five categories of influencers). Because scenario planning is about creating stories about the future, the goal is to identify driving forces that create long-term change.

The next step in scenario building is evaluating and classifying driving forces based on their degree of importance and uncertainty. This classification helps with recognizing the key scenario building blocks (*predetermined elements* and *uncertainties*) and supports determining which pivotal factors will have a consequential effect on the course of events (Özkaynak 2010, 361).

PREDETERMINED ELEMENTS are predictable driving forces that are present in every scenario without relying upon specific events (Wilkinson 1995; Schwartz 1991, 118). Schwartz (1991), lists several criteria that help uncover predetermined elements:

- slow-changing phenomena - for example, population growth, ongoing infrastructure projects, resource development;
- constrained situations;
- in the pipeline - the best example here is the aging population;
- inevitable collisions.

After eliminating the *predetermined elements* from the list of driving forces, the factors that remain are *uncertainties* (Wilkinson 1995; Schwartz 1991, 118). *Uncertainties* are unstable and unpredictable driving forces, directly related to the predetermined elements. Often uncertainties develop through questioning how people might react to predetermined elements (Mäntysalo and Grišakov 2017, 351). It is possible also, under certain circumstances, for predetermined elements to become unpredictable and thus develop into uncertainties, which impacts the scenarios (Blanco et al. 2012, 267).

CRITICAL UNCERTAINTIES are crucial to the established focal question (Wilkinson 1995), and they are the elements that build the *scenario matrix*. Identifying those critical uncertainties

is what leads to defining coherent scenarios, in which all variables connect and compose together a consistent storyline (Özkaynak 2010, 361).

Although many *uncertainties* can be discussed, to advance in scenario building, the focus must go to sorting the *critical uncertainties* into clusters that share a common core (Wilkinson 1995). Those uncertainties can then be arranged on *axes of uncertainty*. Two axes will construct the **SCENARIO MATRIX**, a system of four quadrants which describes four plausible, alternative futures (Wilkinson 1995; Blanco et al. 2012, 265).

The next step in scenario building is adding more substance to the structure created with the help of the *scenario matrix*, by looking back at the *key factors* which influence the *focal issue* chosen at the start. Schwartz (2012) calls this step “fleshing out the scenarios” (263-264). While there are various approaches to scenario planning, Özkaynak (2010) notes that all final scenarios must be “relevant, coherent, consistent, credible and transparent” (360).

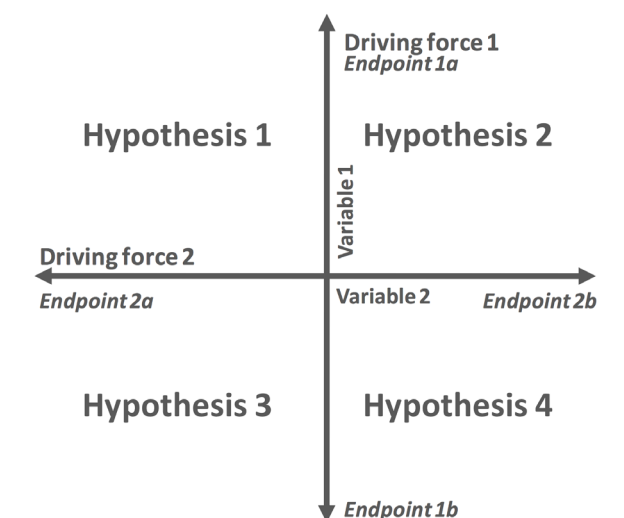


image 72. Building the Scenario Matrix
(Blanco et al. 2012)

FINAL CONSIDERATIONS AND
DECISION MAKING

The final part of scenario building is testing decisions related to the *focal issue* (determined at the beginning of the scenario building process) against the four different scenarios, and analyzing their implications (Schwartz 2012, 265-265). Great decisions are those that perform best in all scenarios, while weak decisions will characterize only one of the scenarios (Wilkinson 1995; Blanco et al. 2012, 266). A significant part of analyzing scenarios is determining signs that will indicate which scenario is unfolding (Schwartz 2012, 264-265).

An important consideration when building scenarios is to avoid making some scenarios more likely to happen or more likely to succeed, or comparing scenarios against their probability (Schwartz 2012, 266). In such cases, it is inevitable that the more probable scenario will receive more interest and effort. The scenario planning method is most efficient when the scenarios explored are equally plausible. Another consideration is the number of scenarios to explore. Schwartz believes that using only three scenarios is precarious since it could lead to a middle, preferred scenario, but more than four scenarios can be too much to apprehend by the human mind (157-158). Most scenario planning projects explore three to four scenarios. Another consideration is including diverse participants into the scenario building process which will generate more diverse ideas and thus encourage the development of diverse scenarios (Zapata and Kaza 2015, 756).

After scenarios are developed, tested, and analyzed, the final phase of scenario planning is decision making and implementing (Keough and Shanahan 2008, 172-175). This part is again

crucial because creating and analyzing scenarios does not automatically reveal the decision pathway to be followed. One strategy could be based on making robust decisions, those that perform well in all scenarios. A different strategy could be based on pursuing multiple decisions simultaneously until the future becomes more clear. A third strategy would be a flexible approach, keeping options open and waiting as long a possible before making implementations.

SCENARIO BUILDING IN
URBAN PLANNING:
THE AVIN AND DEMBNER
METHOD

In urban planning practice, Avin and Dembner endorse the following scenario building model in their 2001 article “Getting Scenario-Building Right”:

- 1. Defining the purpose of the project, reviewing data and resources, understanding the political environment.
- 2. Identifying trends, constraints and issues; as well as identifying stakeholders and their goals.
- 3. Identifying driving forces which shape trends and issues, ranking them by importance and uncertainty; as well as analyzing stakeholder’s goals and objective overlaps.
- 4. Establishing an evaluation criteria.
- 5. Designing possible futures; as well as (stakeholders’) desired futures.
- 6. Building scenarios by aligning possible futures with desired futures.
- 7. Testing and evaluating scenarios.
- 8. Developing plans and policies.

Avin and Dembner’s scenario-building model is based on the concept that a desired future must be chosen from among the possible future scenarios. This model proposes two parallel sets of processes: a rational, analytical process undertaken by the planners which identifies possible futures, and a separate process through which stakeholders communicate their ambitions and requests (Avin and Dembner 2001, 26). Afterward, the planners must select a scenario that aligns with the stakeholders’ interests, and advance from there. Even though this method works towards

a desired future, it is viewed as *scenario planning* and not *vision making* because it has an analytical side that does not start with defining goals, but with identifying and analyzing the key problems. Avin and Dembner admit that their scenario-building model relies on the presumption that stakeholders will change their ideas and accept compromise, which is not always the case (26). Nevertheless, scenario planning can facilitate broader public participation and more varied viewpoints (Hopkins and Zapata 2007, 10).

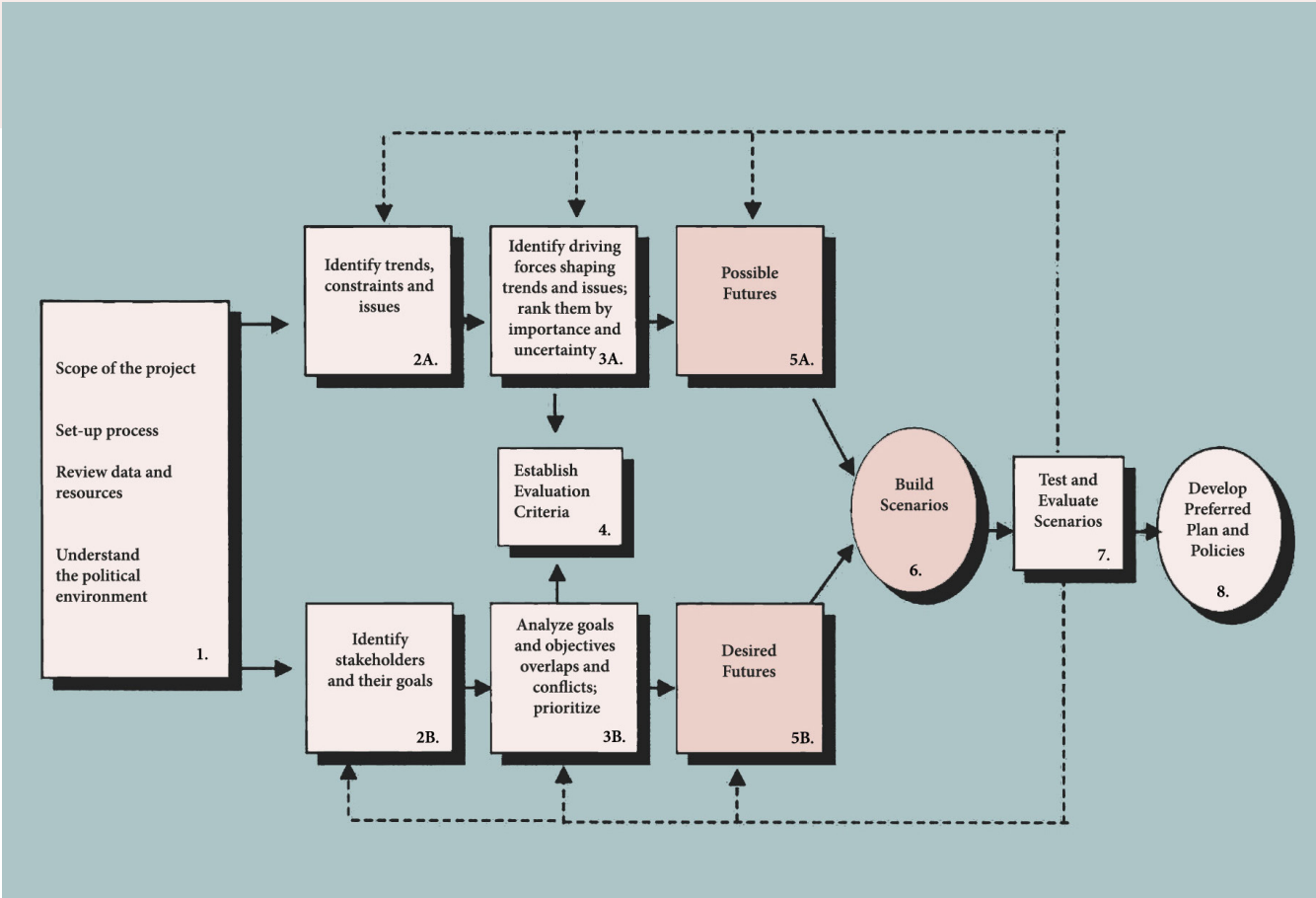


image 73. Avin and Dembner’s Scenario Building Model (2001)

PARTICIPATORY SCENARIO PLANNING

“Scenario making is intensely participatory, or it fails.”
(Schwartz 2012, 266)

Spatial meaning is built collectively through traditions, practices, and experiences, and not in isolation (Albrechts 2010, 13). Creating alternative scenarios of the future must, therefore, involve collective participation. Scenarios show how the future can be different, and ideally, better. Shaping a better future requires innovation and creativity, and sharing a vision of that future brings together people and creates interaction. Participatory scenario planning gives people “a clear sense of direction, a mobilization of energy, and a sense of being engaged in something important” (Albrechts 2010, 12). It motivates people into being an active part of the change.

When building possible futures, a solo planner or the public planning office alone can not account for all possible viewpoints and considerations (Indovina 2010, 75). In his reference book about scenario planning, Schwartz (1991) writes that variables which “often seem obvious to one person [are] hidden to another” (108). Brainstorming is more powerful when done

within a multidisciplinary team. Participatory planning in the context of scenario planning is therefore highly important. Including diverse groups of people in scenario planning creates a platform for discussing different (and sometimes contradictory) ideas and ways of thinking (Chakraborty 2011, 388). For this reason, participatory scenario planning is particularly relevant in a multicultural society.

Involving extensive and diverse public participation in scenario planning is the cornerstone of building futures that are not only endorsing the stakeholders’ preferred interests (Indovina 2010, 73-74). Participatory scenario planning advocates for prioritizing the process and not the result (Chakraborty 2011, 387). It supports open discussion and interaction between different stakeholders, citizens, and organizations. It can lead to expressing dissatisfaction and concerns with current trends, which helps towards building alternative futures (Indovina 2010, 74). Furthermore, participatory scenario planning advocates for equally including also marginalized population (Chakraborty 2011, 387).

Participatory scenario planning is essential not only in the scenario-building phase but also in the evaluation stage (Indovina 2010, 73). Therefore,

it must involve long-term commitment of both public and private participants.

Although a participatory approach to scenario planning is essential, it needs to be organized with caution. Alternatively, participatory planning can become superficial, carried out without real interest when its purpose is foremost to answer legal obligations or to draw public approval (Klosterman 2013, 164). This can happen if participation is built only as a vehicle for endorsing the policymakers’ preferred scenario, through deliberately directing the public discussion towards approving a preconceived scenario (Chakraborty and McMillan 2015, 19). Participation as a mechanism for developing political unanimity fails its original purpose, of brainstorming diverse viewpoints and ideas.

Furthermore, in a consumer society where peoples’ values and preferences are constantly shaped by the structures that are expected to answer their needs (Albrechts 2010, 13), and in the absence of information or reasonable time, citizens may be compelled to base their ideas on wishful thinking rather than rationality. Klosterman (2013) argues that using foresight tools (such as quantitative analysis of current trends) and accurate information (such as constraints and issues) can help overcome the difficulties of involving the public in scenario planning (166).

SCENARIO PLANNING USED IN URBAN PLANNING: CRITICISM AND RESPONSE

“Done well, scenario planning allows community members to learn about their community, identify what the community can control, recognize what it cannot control, and consider the implications of choices they make today.”
(Klosterman 2013, 164)

The last decade has seen an increasing number of urban planning projects use scenario planning methods. However, the use of scenario planning in the field of urban planning also faces criticism (Klosterman 2013; Chakraborty and McMillan 2015; Zapata and Kaza 2015). Most criticism is related to the alterations made to scenario planning methodology, as it adapted from the private business sector to the urban planning practice: using unequal or unbalanced scenarios, choosing a preferred scenario, failing to involve diverse public participation (Chakraborty and McMillan 2015, 18).

CRITICISM

The foremost criticism involves using scenario planning towards developing a preferred scenario. Sometimes multiple, yet all preferred, scenarios are developed (Zapata and Kaza 2015, 755). Scenario planning takes this path when forecasting is used, but this leads to shortcomings because the fundamental role of scenarios is not attempting to predict the future, but anticipating possible futures and preparing for them by making strategic choices in the present (Mäntysalo and Grišakov 2017, 353). Alternatively, as described by Avin and Dembner (2010), scenario planning can be used as a tool to connect possible scenarios with stakeholders’ goals. This method uses normative scenarios and advocates for choosing a preferred future



image 74. Participatory Planning

from a pool of possible scenarios, based on the concept that planners can decide, cause and control a particular future. Although scenario planning is used with the intention to account for uncertainty, choosing a preferred scenario fails to achieve that (Zapata and Kaza 2015, 754).

Secondly, urban planning often explores unbalanced futures, either by designing scenarios which do not share the same level of probability or by oversimplifying them. When scenarios have different probabilities, the inevitable temptation is to navigate towards the scenario with the highest level of probability. Equally problematic is also the practice of designing limited scenario options: one “business-as-usual” future which describes a projection of the present development and a second, contrasting, option. Sometimes two different contrasting options besides the “business-as-usual” scenario are made, but one is a dystopian view of the future. When urban scenarios are built with the intention to manage trends that are failing the current development, the “business-as-usual” and the dystopian scenarios are developed only to contradict and differentiate the planners’ preferred option (Klosterman 2013, 164). Oversimplified scenarios endorse the desired scenario (Chakraborty and McMillan 2015, 19).

Lastly, public planning seldom includes diversity, accounting for both “wide and deep participation” (Zapata and Kaza 2015, 755). Instead, participatory scenario planning is frequently only a vehicle for endorsing the planners’ preferred scenario, created based on their idea of the prosperity of the general public (Klosterman 2013, 165). The criticism is that, although participants have some input and can influence minor changes, they are still mostly directed towards approving a preconceived scenario (Chakraborty and McMillan 2015, 19).

RESPONSE

The original role of scenario planning is to account for uncertainty by creating multiple, alternative, flexible plans. Those alternative future scenarios are not meant to lead to a single, preferred strategy pathway. Hopkins and Zapata (2007) observe that the current urban planning practice, which uses normative scenarios, operates with the preconception that the future can be controlled. They recommend a change of approach: to extend the scenario planning practice towards developing multiple, alternative, equally feasible scenarios that explore uncertainties, unlike the most frequently used current planning practice of selecting the preferred scenario from a pool of various options (10). The explorative scenario planning method recognizes that the future cannot be decided, controlled or singled out. Instead, it advocates for “keeping” multiple scenarios under observation, making decisions that have beneficial outcomes over as many scenarios as possible, and being prepared to adapt to change when the future unfolds.

At the same time, in order for scenario planning to have a more positive effect in urban practice, the planner must understand and accept that scenarios must not be classified as good or bad, but instead as a selection of equally plausible options, involving also unusual, innovative, and perhaps even distressing possibilities (Klosterman 2013, 164). Planners need to trace back to the original corporate approach which emphasizes the use of multiple, equally plausible scenarios, as well as keeping a level of flexibility. This flexibility is what makes scenario planning effective. Effective scenario planning increases comprehension and awareness of the outcomes and consequences which present choices have on the future, and encourages the capability to adapt to unpredictable situations. Scenario planning has considerable potential in urban planning.

CONCLUSION: SCENARIO-BASED STRATEGIC PLANNING

Scenario-based strategic planning accounts for complexity and uncertainty. The planning process starts with analyzing the context: detecting strengths, weaknesses, opportunities, and threats, determining available internal and external resources (not only physical, but also intellectual, cultural, social), and exploring current trends and uncertainties. From there, it creates long-term, equally possible future scenarios, which are used to recognize strategic decisions that are most effective in reaching different, possible futures. Scenario-based strategic planning generates innovative designs and strategies for implementation; builds perception and awareness; and creates a structure for making choices, designing action plans, implementing processes, evaluating responses, analyzing results, and adjusting the course of action (Albrechts 2010, 6).

Scenario-based strategic planning brings significant beneficences to the field of urban planning: it grants planners the opportunity to address complex situations characterized by uncertainty (Schoemaker 1991); it promotes the use of a comprehensive and methodical planning process (Chakraborty and McMillan 2015, 19); it incorporates the use of qualitative data (Khakee 2010), tacit knowledge and personal experiences (Klosterman 2013); it creates the space to welcome participatory planning, as well as to share and discuss conflicting perspectives in a diverse society (Chakraborty 2011, 388); and it encourages thinking boldly about the future (Cole 2001; Isserman 2014).

9.
MALINDI
SCENARIO-BUILDING
PROCESS

10.
MALINDI
SCENARIOS

*“We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.”*

(T.S. Eliot 1943 “Little Gidding”)

In this final part of the thesis, the scenario planning method is applied to the Malindi case, with the aim of demonstrating its usability and building knowledge regarding scenario making. Following the explorative scenario framework, and based on the findings from the first two chapters, four different scenarios are built. The methods used to present the scenarios are scenario diagram and scenario narratives.

PART FOUR
SCENARIO
DEVELOPMENT

9. MALINDI SCENARIO - BUILDING PROCESS

WHY USE SCENARIO PLANNING IN THE CASE OF MALINDI?

“Without planning, communities can only stumble blindly into a future they make no effort to shape.” (Klosterman 2014, 162)

The future of Malindi is unpredictable, affected by many possibilities and uncertainties. Making effective strategic decisions in the present is crucial to building a sustainable social and urban environment. Planners and stakeholders in Malindi are equipped to make sustainable decisions if they understand the possible futures which their different choices may lead to, and prepare for uncertainties. Scenario planning is a useful tool for understanding possible futures. It helps planners be ready to respond to future trends.

Scenario planning can help uncover possibilities and causalities that might have been overlooked by the Malindi *Integrated Strategic Urban Development Plan* (ISUDP), and it can also uncover disadvantageous futures (Mäntysalo and Grišakov 2017, 351). The current situation of Malindi is complex, marked by many challenges related to urban informality, poor access to infrastructure, environmental degradation, socioeconomic disturbances, and the emergence of competitors in the tourism industry. Scenario planning addresses complex situations

characterized by uncertainty (Schoemaker 1991). Moreover, while the local government does not thoroughly monitor development in areas marked by urban informality, scenario planning does not rely solely on quantitative data. Instead, it incorporates qualitative data, tacit knowledge, and personal experiences (Klosterman 2013). Furthermore, scenario planning creates a space which welcomes participatory planning and discussing conflicting perspectives in a diverse society (Chakraborty 2011, 388), which is the same approach that Kenya Municipal Program supports.

Most importantly, scenario planning encourages thinking boldly about the future (Cole 2001; Isserman 2014), and as concluded in the analysis chapter, Malindi needs a strong vision for the future. The advantages of scenario planning are not only the resulting visions of the future but also the process of reaching those visions, which encourages a systematic analysis of trends and critical uncertainties.

As explained in the theory chapter, the foremost phase of scenario planning is determining if scenario planning is relevant, advantageous and effective for the case of Malindi. Examining the external factors that lead to a favorable outcome of scenario planning, we observe that Malindi would considerably benefit from using scenario planning to explore possible futures (image 75). This leaves us with the internal factors: the policymakers’ and stakeholders’ willingness to participate in scenario planning. Scenario

planning is not often used because it is not understood, or it is considered too complicated. As Schoemaker (1993) describes it, it is both “art and science, deduction and induction, structured and fluid, rational (in the unitary actor sense)

and political” (194). The hope is that the present work will convince the Malindi stakeholders of the benefits of applying scenario planning to the current case.

SCENARIO PLANNING FEASIBILITY		
FACTORS THAT CAN LEAD TO A FAVORABLE OUTCOME OF SCENARIO PLANNING	MALINDI CASE	COMMENTS
<> high uncertainty about the future;	+++	- new emerging tourism trends;
<> frequent high-impact discontinuities;	+++	- the global recession of the last decade shook the world’s economic power stability; - in the last five years, the Kenyan Coast experienced repeated political based terror attacks;
<> insufficient evident opportunities;	++	- the ideas explored by the ISUDP are mainly focusing only on international tourism mixed with some agricultural economy;
<> strategic planning took over strategic thinking, focusing more on incremental planning than vision making;	+++	- the current ISUDP for Malindi focuses on incrementally solving the physical condition of the urban environment;
<> significant change is likely to happen;	++	- “Malindi on life support”;
<> heterogeneous community reflecting different views an opinions;	+++	- Malindi is characterized by considerable ethnic diversity; - the Swahili and Mijikenda communities do not welcome the expansion of international tourism, while the Kikuyu, Kamba and Kisii communities thrive around international tourists;
<> an aspiration for finding a common framework;	+++	- there is a strong common interest in investing in planning for the future of Kenya;
<> competitors using scenario planning;	-	- unknown;

Image 75. Malindi Scenario Planning Feasibility

SCENARIO - BUILDING PROCESS

The Literature Review gathers information on the socioeconomic condition of Malindi, revealing the town’s unique history, the influence of tourism on the local community, and the current local trends. It also discusses emerging international tourism trends. The Malindi Case Analysis section evaluates the current spatial condition of Malindi and describes the state of the recent urban planning development proposal. All this information forms the basis for scenario planning. The scenario building process follows the steps described in the Theoretical Framework chapter.

1. FOCAL QUESTION

Research reveals that the tourism industry in Malindi is in decline and that tourism rejuvenation can only be achieved with a radical shift in touristic strategy. Furthermore, the current Malindi *Integrated Strategic Urban Development Plan* (ISUDP) explores project proposals that encourage economic development and new employment opportunities, acknowledging that in order for Malindi to develop into a sustainable town, it is paramount to diversify its economy. Therefore, the focal question of the current scenario planning exercise explores how alternative tourism strategies and diversifying the economy would shape the socio-urban fabric of Malindi town in the next 30 years.

SCENARIO - BUILDING PROCESS	
• FOCAL QUESTION	How would exploring alternative tourism strategies and diversifying the local economy affect the socio-spatial fabric of Malindi town of the next 30 years?
• FACTORS THAT INFLUENCE THE FOCAL ISSUE	- economy; - tourism trends;
• PREDETERMINED ELEMENTS	- airport upgrade; - poorly educated workforce generation; - rapid growing population structure; - Galana - Sabaki river north of Malindi; - availability of agricultural land; - increased availability and development of technology harvesting renewable energy; - informal settlements;

image 76. Malindi Scenario Building Process, Part I: Focal Question

2. DRIVING FORCES

Driving forces emerge from the Literature Review. They represent a combination of analysis related to current trends in Malindi and interpretations of possible future developments explored by the Malindi stakeholders during the preparation of the ISUDP workshop.

Some forces that bring change are *predetermined elements*, predictable driving forces that are present in all scenarios regardless of how the other drivers of change influence the scenarios. The identified key predetermined elements are: the current airport upgrade which will connect Malindi to international flights; the low level of education in the current working force generation; the growing population structure; the natural boundaries of the town; the availability of agricultural land; the urban informality; the increased availability and development of technology harvesting renewable energy.

Uncertainties are unstable and unpredictable driving forces, essential elements that bring significant impact on the environment and determine the outcome of events. *Uncertainties* are identified using the STEEP method described in the previous section: exploring socio-cultural, technological, economic, environmental, and political processes that create long-term change. Because the tourism industry in Malindi is an important factor that influences change and impacts the socioeconomic environment, a sixth influencer category is created to reflect uncertainties related to the presence of tourism in the city.

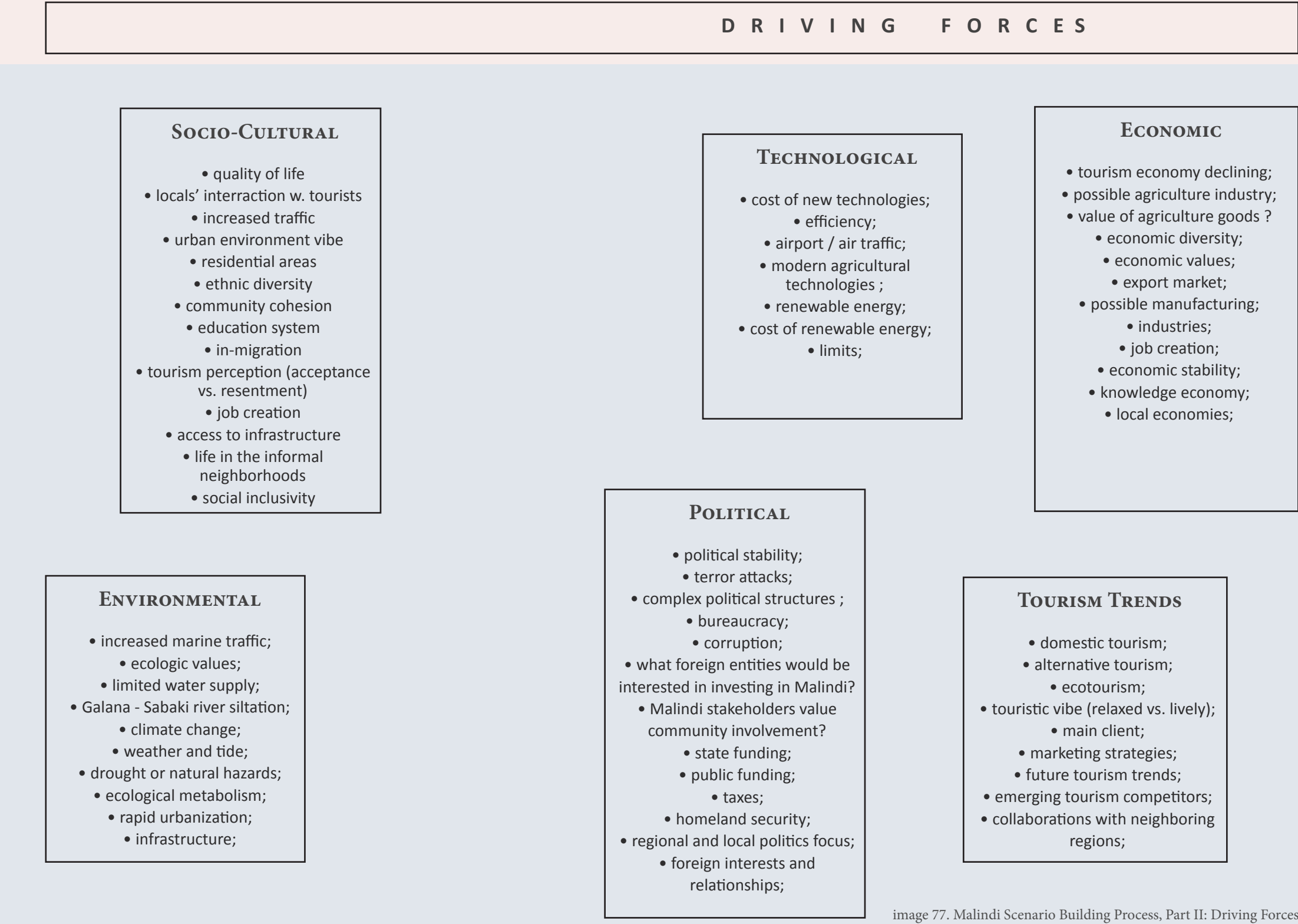


image 77. Malindi Scenario Building Process, Part II: Driving Forces

3. AXES OF UNCERTAINTY

The most relevant driving forces are identified, clustered around a common core, and arranged on *axes of uncertainty*. These driving forces form the basis for potential scenarios.

Finally, looking back at the focal question, “*How would exploring alternative tourism strategies and diversifying the local economy affect the socio-spatial fabric of Malindi town of the next 30 years?*”, the uncertainties that are crucial to the established focal question are outlined.

AXES OF UNCERTAINTY

- **domestic tourism <...> international tourism:**
 - Malindi marketed as a relaxed and quiet vacation spot <...> Malindi marketed as a lively vacation spot;
 - tourism strategy to focus exclusively on the local region <...> tourism strategy to collaborate with other regions towards building circuit tours;
 - social resentment towards tourism <...> openness towards tourism;
 - community cohesion <...> rotating workforce and immigration;
 - economy focusing mainly on tourism <...> diversification of the economy;
- **economy focusing on agricultural production <...> business and service economy:**
 - stable political environment <...> political turmoil and terror attacks;
 - public funding <...> private funding;
 - ecologic values <...> economic values;
 - public community <...> private enterprise;

image 78. Malindi Scenario Building Process, Part III: Axes of Uncertainty

4. SCENARIO MATRIX

Pairing together two axes of uncertainty constructs a scenario matrix: a system of four quadrants which describes four plausible, alternative futures.

The *axes of uncertainty* chosen for the development of scenario matrixes in this example are the ones that have the highest impact on the focal question:

- encouraging and supporting domestic tourism as opposed to continuing to market exclusively for international tourism;
- exploring economic growth through developing the agriculture sector as opposed to supporting local entrepreneurs and the growth of a business and service economy.

The resulting *scenario matrix* explores four possible futures generated by the intersection of economic and tourism strategy alternatives.

In this exercise, the four resulting scenarios are numbered clockwise, and will continue to be presented in this order:

- 1. Domestic Tourism + Business Economy
- 2. Agriculture Economy + Domestic Tourism
- 3. Agriculture Economy + International Tourism
- 4. International Tourism + Business Economy

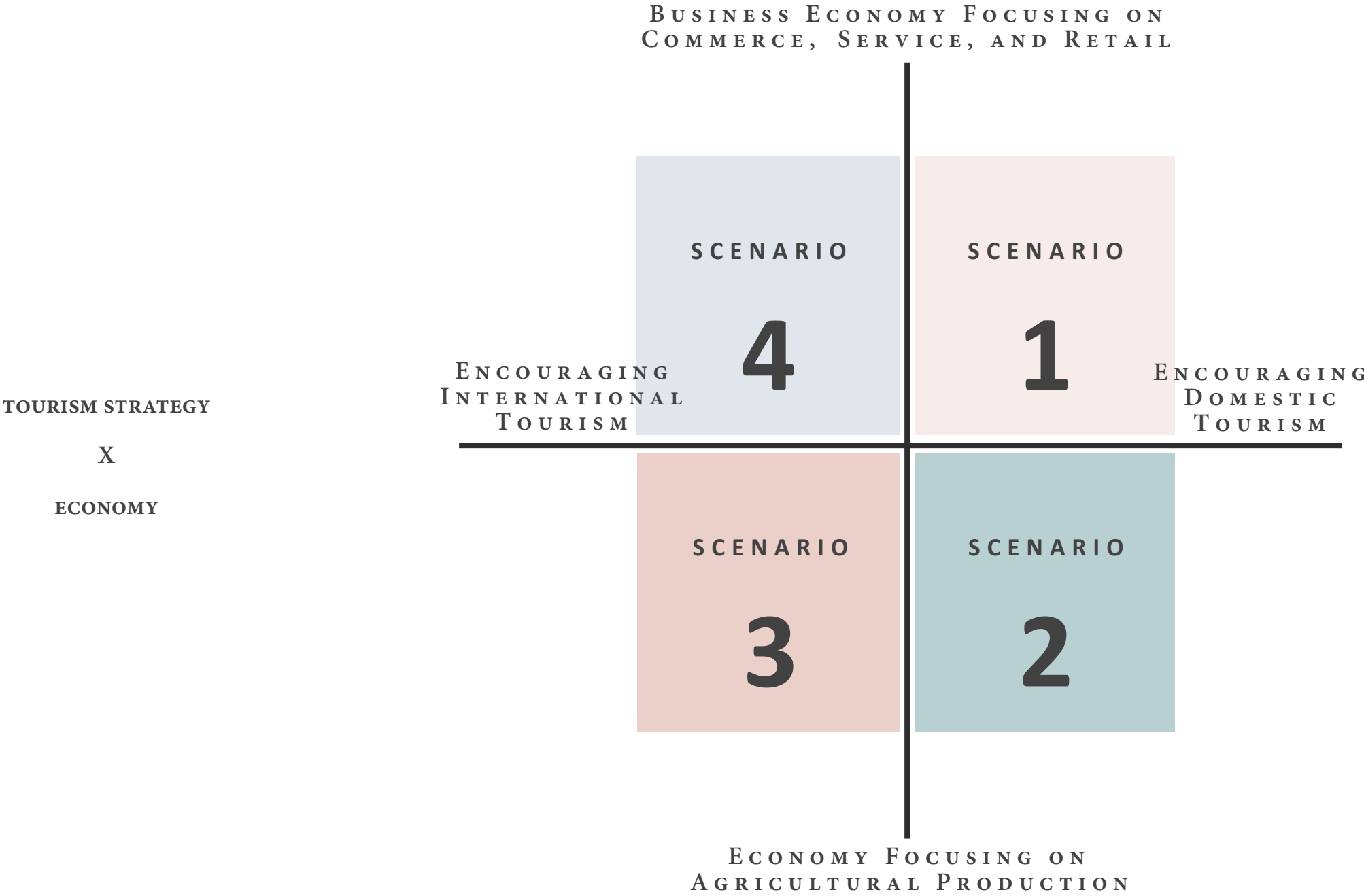


image 79. Malindi Scenario Building Process, Part IV: Scenario Matrix

The resulting *scenario matrix* explores four possible futures generated by the intersection of economic and tourism strategy alternatives.

- 1. Domestic Tourism + Business Economy
- 2. Agriculture Economy + Domestic Tourism
- 3. Agriculture Economy + International Tourism
- 4. International Tourism + Business Economy

The scenario possibilities that shape the matrix emerge from the Literature Review and Analysis chapters: project proposals included in the *Malindi Integrated Strategic Urban Development Plan* (ISUDP), ideas presented by the winning entries for the *International Design Collaboration for Kenya* (IDCK) competition, and recognized resource opportunities and proposals originating from research.

SCENARIO 4

INTERNATIONAL TOURISM + BUSINESS

- focus on business development;
- research center for tourism management and hospitality studies;
- high end restaurants;
- lively entertainment;
- commerce and smart businesses;
- international airport
- well connected city
- vibrant urban environment;
- strong physical infrastructure;
- urban densification as a strategy for sustainability: promoting connectivity, accessibility, and requiring less land and energy;

SCENARIO 1

DOMESTIC TOURISM + BUSINESS

- focus on local culture;
- recreation, sports, playgrounds;
- lively beach promenade;
- beach football + volleyball tournament;
- beach marathon;
- Swahili music festival;
- integrating informal communities;
- vocational programs;
- trade and commerce;
- local guest houses;
- Swahili history museum;
- pedestrian and biking routes;
- conference tourism; corporate teambuilding workshops;

INTERNATIONAL TOURISM + AGRICULTURE

- focus on human capacity development;
- Sabaki Research Center: sustainable farming + innovation + motivation;
- zero-emission agriculture framework;
- agricultural entrepreneurship;
- restore dignity to farm work;
- technologies to enhance farm production;
- irrigation programs; biogas;
- fish market + fish landing center;
- butterfly farming for silk production and commercial trade;
- tourist info center;
- agrotourism;

DOMESTIC TOURISM + AGRICULTURE

- focus on environmental sustainability;
- research center for sustainable urban + environmental development;
- renewable energy solutions;
- green city;
- integrating technological developments;
- sustainable mobility;
- smart city;
- agro-industrial ecological park;
- sustainable fishing + ocean protection;
- recycling; circular economy;
- biogas farming;
- retirement homes;
- school camps;

SCENARIO 3

SCENARIO 2

image 80. Malindi Scenario Building Process, Part IV: Scenario Matrix

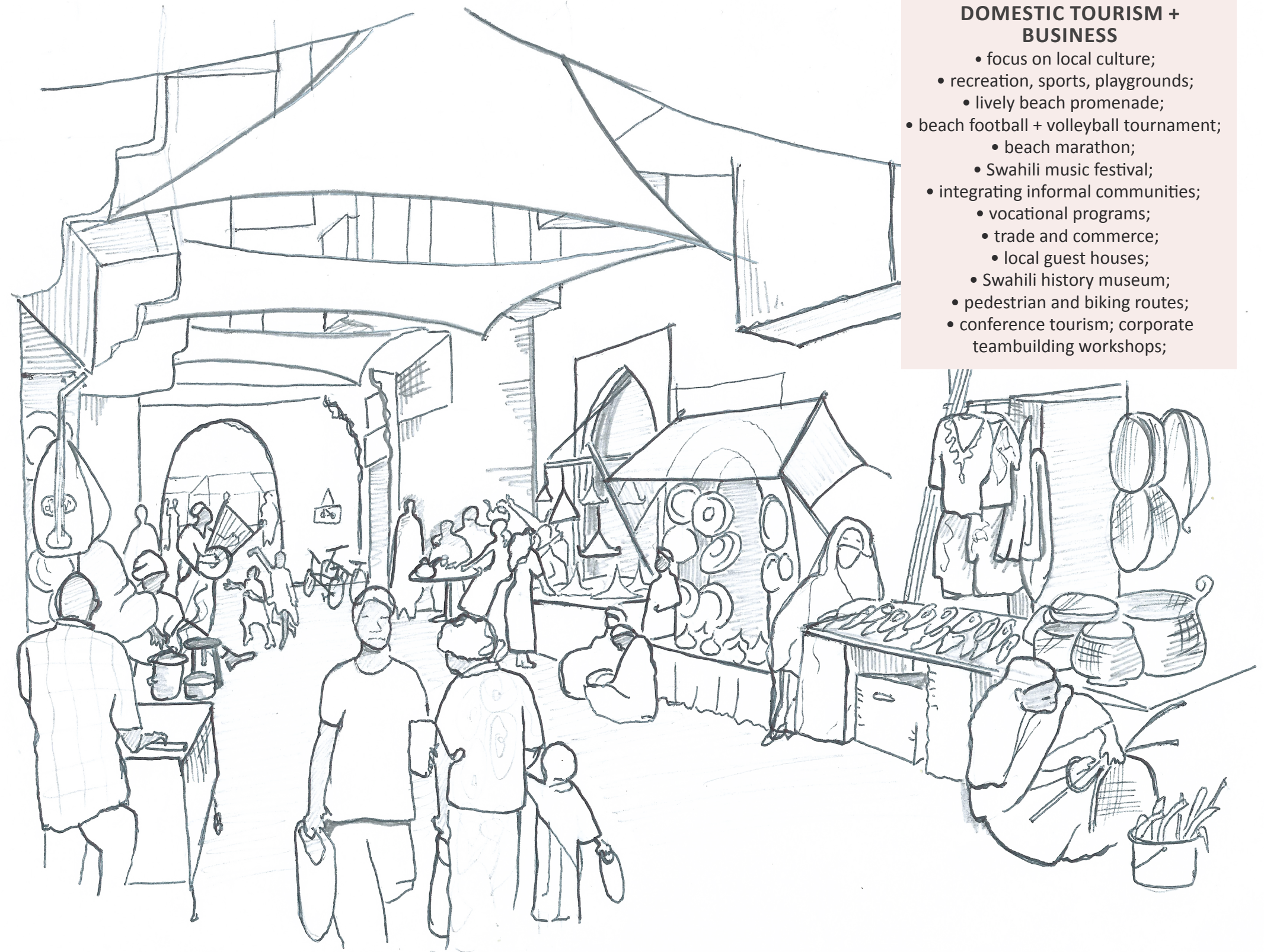
MALINDI SCENARIOS OVERVIEW

*"This present moment used to be
the unimaginable future."*

(Stewart Brand, The Clock of the Long Now)

SCENARIO 1

In the first scenario, the government recognizes the current decline in touristic interest as an opportunity to encourage local investors in purchasing back some of the foreign-owned hotels and tourism facilities at a significantly lower price. This scenario describes solutions for exploring domestic tourism while supporting the development of local businesses. The town promotes local cultural activities to attract upcountry visitors who come to Malindi to seek relaxation and entertainment inspired by Kenyan culture and values. This scenario does not pursue rapid economic growth but instead a stable, steady growing economy. The local government supports educational projects teaching young adults vocational trades, and the economy revolves around trade and commerce. In this scenario Malindi succeeds at integrating informal settlements, supports economic productivity within informal settlements, revitalizes the waterfront and opens more of the beach to the local public, enhancing waterfront commerce. Malindi grows into a lively town, full of cafes, restaurants, small shops, and boutiques. As domestic tourism picks up, the former image of Malindi as an upscale international acclaimed tourist destination fades. The locals reminisce on the times Malindi was renown in Europe, but are content with the new community cohesion influenced by the mutual collaborative effort in rebuilding the town around local values.



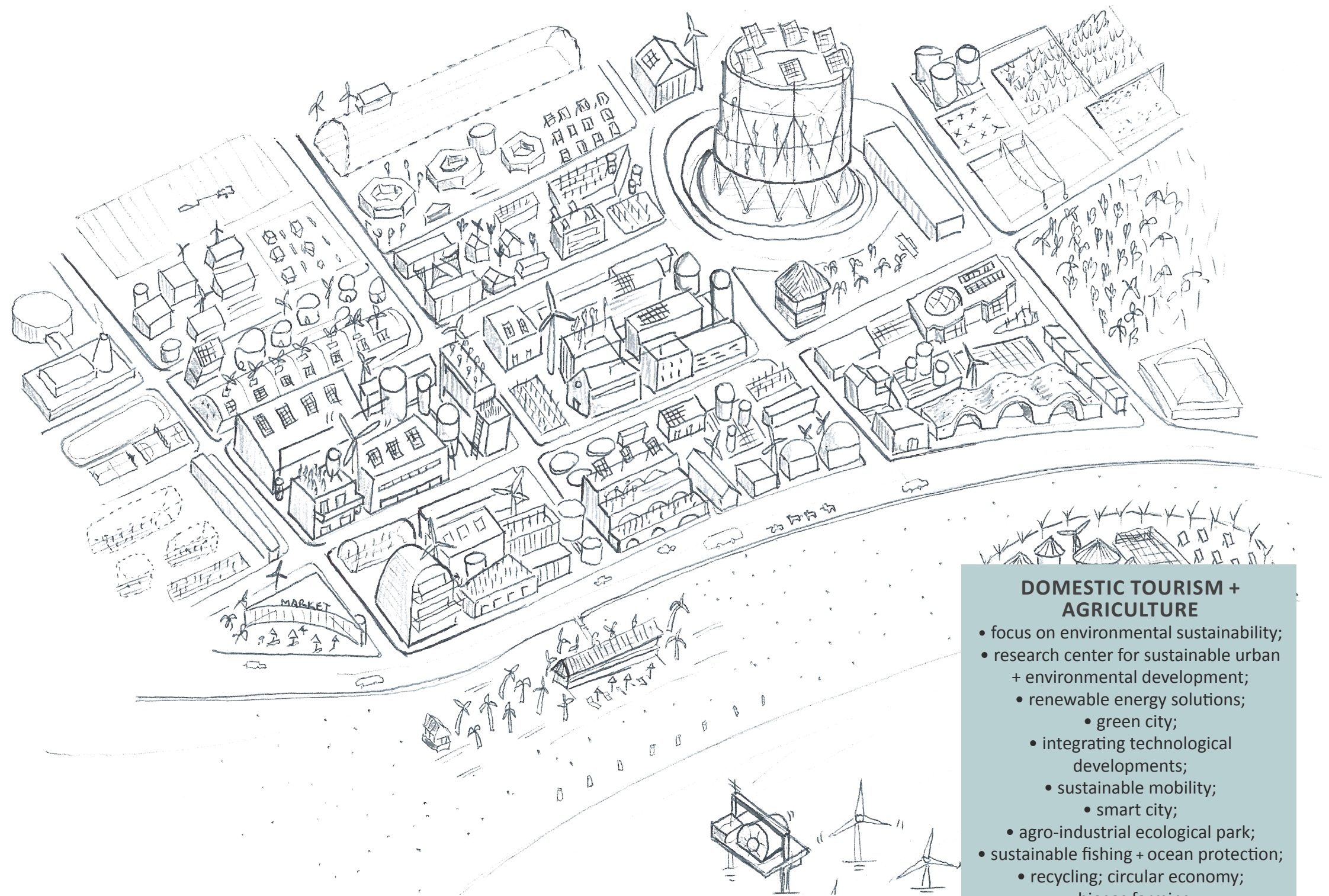
DOMESTIC TOURISM + BUSINESS

- focus on local culture;
- recreation, sports, playgrounds;
- lively beach promenade;
- beach football + volleyball tournament;
 - beach marathon;
- Swahili music festival;
- integrating informal communities;
 - vocational programs;
 - trade and commerce;
 - local guest houses;
- Swahili history museum;
- pedestrian and biking routes;
- conference tourism; corporate teambuilding workshops;

image 81. Concept Image for Scenario 1: Domestic Tourism and Business Economy Scenario (Ana Moryon, 2019)

SCENARIO 2

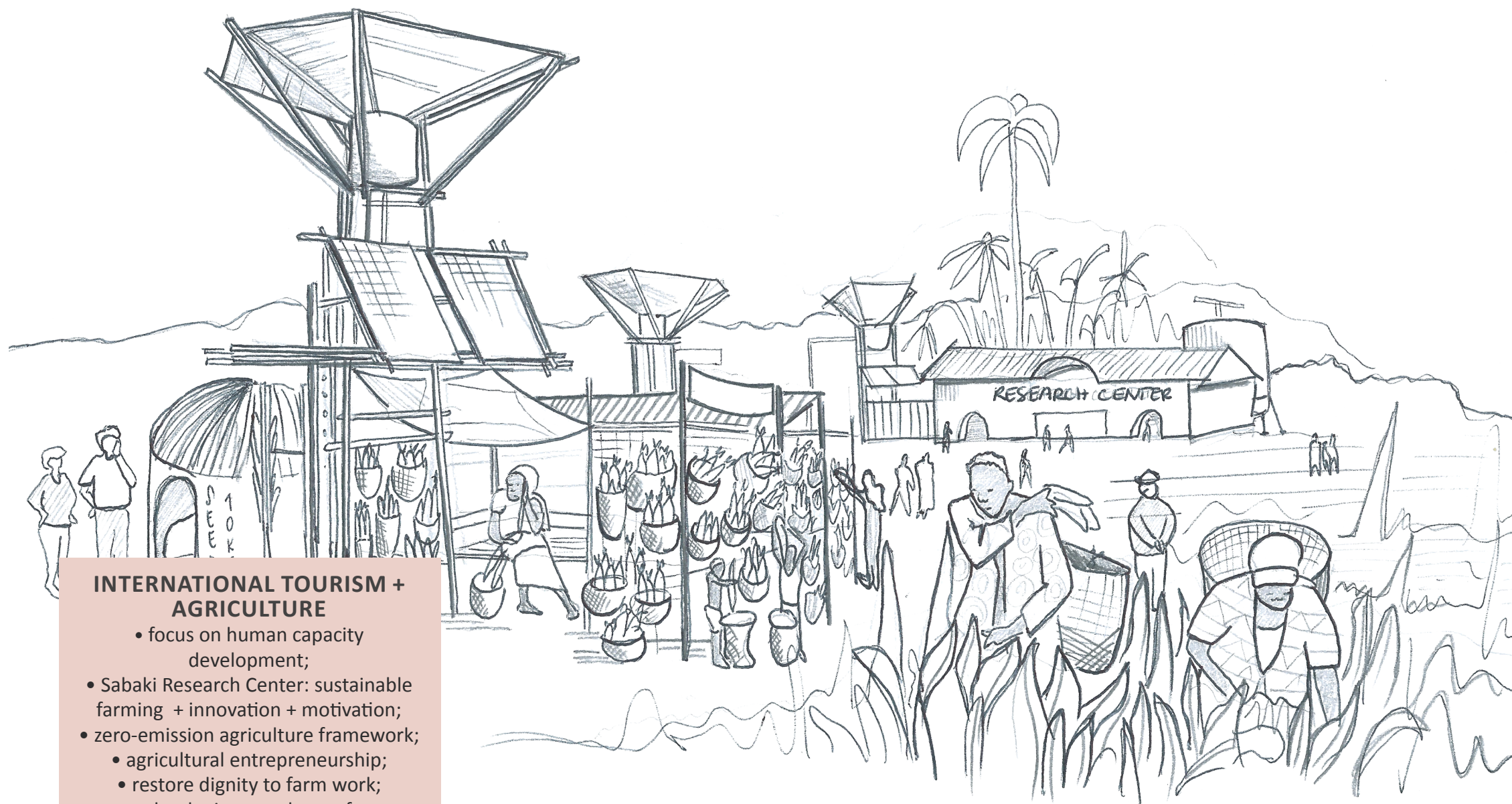
The current decline in touristic interest is again viewed as an opportunity to purchase back some of the tourism facilities at a significantly lower price, but in this second scenario the local government focuses on environmental sustainability and agro-industrial ecological development. Malindi aims to prevent environmental problems through environmental technology and green economic growth and focuses on building a circular economy. One of the first steps Malindi takes is to implement projects focusing on harvesting renewable energy by installing solar panels in all new developments, researching the tidal power and ocean current resources, and establishing a network of farm biogas projects, utilizing waste and improving nutrient cycling. It also builds a recycling power plant which processes waste from the Kilifi county. Malindi is now at the center of an agro-industrial ecological park, where produce is used for local and regional consumption, and some for export. Tourism focuses on welcoming school groups interested in learning about the green economy, Kenyan families looking for relaxation, international conferences focusing on environmental awareness. Malindi also becomes a choice retirement place for both internationals and locals.



DOMESTIC TOURISM + AGRICULTURE

- focus on environmental sustainability;
- research center for sustainable urban + environmental development;
- renewable energy solutions;
 - green city;
- integrating technological developments;
- sustainable mobility;
 - smart city;
- agro-industrial ecological park;
- sustainable fishing + ocean protection;
- recycling; circular economy;
 - biogas farming;
 - retirement homes;
 - school camps;

image 82. Concept Image for Scenario 2: Domestic Tourism and Agriculture Economy (Ana Moryon, 2019)



INTERNATIONAL TOURISM + AGRICULTURE

- focus on human capacity development;
- Sabaki Research Center: sustainable farming + innovation + motivation;
- zero-emission agriculture framework;
 - agricultural entrepreneurship;
 - restore dignity to farm work;
 - technologies to enhance farm production;
 - irrigation programs; biogas;
- fish market + fish landing center;
- butterfly farming for silk production and commercial trade;
 - tourist info center;
 - agrotourism;

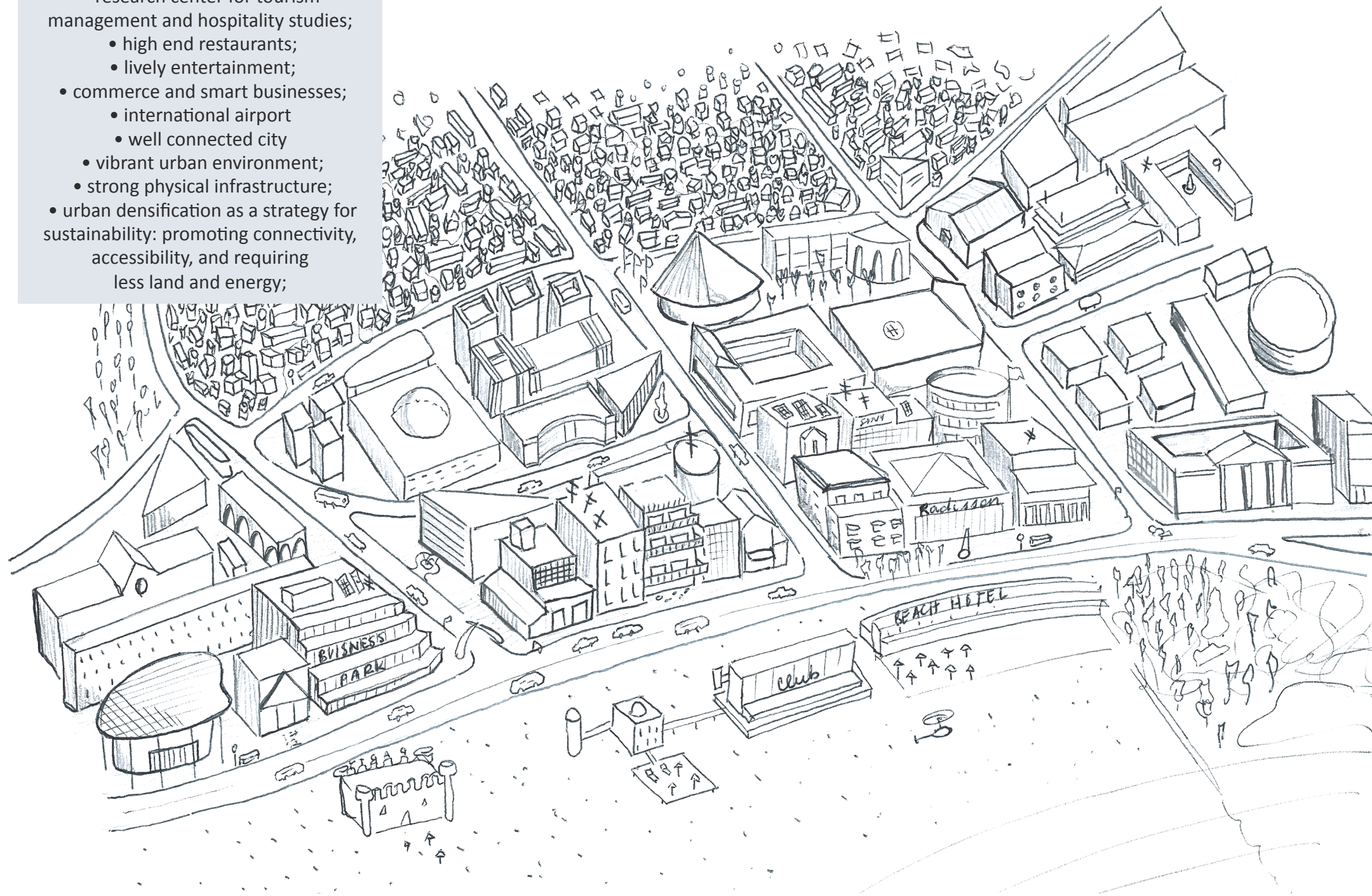
SCENARIO 3

The third scenario supports agricultural entrepreneurship and continues to welcome international tourism. The government revitalizes the agriculture sector while focusing on improving the livelihoods of rural Mijikenda communities living in the rural suburbs of Malindi, as well as the inner-city Swahili fishermen, supporting local farming. An essential component of this scenario is its strong focus on human capacity development through educating and motivating the Malindi society towards a value system that focuses on the power of human resources. The Sabaki Research Center becomes a pivotal project in Malindi, a social program that develops a new vision for the community. It aims at restoring dignity to farm work, raising the standard of living of Malindi communities, and rejuvenating the local economy through building an agricultural entrepreneurship culture. It combines training programs aimed at social and economic development through raising agricultural knowledge, developing entrepreneurship skills, raising human capability, and fostering innovation. It also researches local farming practices, new technologies and methods to enhance resources and improve production while respecting the environment and society. It promotes sustainability, eco-agriculture, biodiversity conservation, zero emission production, and a regenerative economy. Some local farms also develop agrotourism programs, and the experience of agricultural innovations in a traditional farming society attracts international tourists.

image 83. Concept Image for Scenario 3: International Tourism and Agriculture Economy (Ana Moryon, 2019)

INTERNATIONAL TOURISM + BUSINESS

- focus on business development;
- research center for tourism management and hospitality studies;
- high end restaurants;
- lively entertainment;
- commerce and smart businesses;
- international airport
- well connected city
- vibrant urban environment;
- strong physical infrastructure;
- urban densification as a strategy for sustainability: promoting connectivity, accessibility, and requiring less land and energy;



SCENARIO 4

The fourth scenario represents international tourism mixed with a business economy. Although these variables are more or less the current drivers influencing the economy in Malindi, it is important to note that this scenario is not created as a “business-as-usual” model, assuming that the current circumstances perpetuate. The ISUDP already acknowledged that the business-as-usual scenario is dystopian and recommended against it. Therefore, instead, this scenario explores how Malindi develops if the local government continues to strive to attract international tourism while pursuing economic growth by supporting the development of local entrepreneurs and a business economy thriving from tourism. Furthermore, it assumes the successful implementation of the infrastructure component of the current ISUDP and aims to rejuvenate tourism by following Butler’s proposal of developing alternative touristic products and new artificial attractions, followed by aggressive marketing aimed at wealthy international tourists. In this scenario, Malindi succeeds in achieving economic rejuvenation and urban growth.

However, the investments poured into creating alternative touristic products are bringing only moderate returns because the tourism hotel industry is still vastly owned by foreign investors. Nevertheless, following the active efforts made towards modernizing the local infrastructure, the tourism industry rejuvenates for a time. As the economy grows, in-migration picks up again, and Malindi faces rapid urbanization and rapid urban growth, followed by the creation of new informal settlements. The hotel development areas stretching along the beach remain segregated, and the town develops around the central business district. Malindi experiences increased segregation, inequality, and social turmoil as the local values and culture continue to be disregarded.

image 84. Concept Image for Scenario 4: International Tourism and Business Economy (Ana Moryon, 2019)

10. MALINDI SCENARIOS

“Our predecessors dared to dream and to create. Today we must again learn how.”
(Isermann 2014, 18)

The current scenario exercise takes on an *explorative-strategic scenario* approach, exploring possible futures influenced by internal decisions. The presented scenarios are not created as extrapolations of present trends, so they do not include a “business-as-usual” scenario. They are built with the future as a starting point and explore a 35 years future vision. What is important to remember about explorative scenarios is that they do not focus on a desired future, but instead they explore alternative possibilities. They aim to reveal the most robust decisions, resulting in positive outcomes across various possible future scenarios. Explorative scenarios encourage the capability to adapt to changing situations through building “strategic resilience.” Therefore, explorative scenarios are most efficient in situations dealing with high uncertainty.

The purpose of the scenario building study is to explore how Malindi town could develop and what consequences certain choices would have on the development of the town. Two methods are used to present the Malindi scenarios:

- SCENARIOS’ DIAGRAM and
- SCENARIO NARRATIVES.

This scenario building study does not seek to be an answer that covers all possibilities. Instead, it wishes to exemplify the method for scenario building with the hope that will draw attention to where strategic decisions could lead, spark participatory discussion, and create a basis for the formation of a stronger vision for Malindi.

1. SCENARIOS’ DIAGRAM

The *Scenarios’ Diagram* lists possible drivers of future change, and how they influence the different scenarios. In addition to the change factors considered in the diagram, each scenario has taken into account the predetermined elements and the ideas addressed during the capacity building workshop, including the community’s distinct interest in achieving environmental sustainability.





SCENARIOS’ DIAGRAM				
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4
KEY DRIVERS	BUSINESS ECONOMY + DOMESTIC TOURISM	AGRICULTURE ECONOMY + DOMESTIC TOURISM	AGRICULTURE ECONOMY + INTERNATIONAL TOURISM	BUSINESS ECONOMY + INTERNATIONAL TOURISM
CITY VIBE	hipster city	eco city	eco town	bustling city
KEY VALUES	- economic stability; - local culture; - community cohesion;	- environmental and economic sustainability; - green growth;	- human capacity development;	- rapid economic and urban growth;
ECONOMY	- trade and commerce; - network economy;	- agro-industrial ecological development; - circular economy;	- eco agricultural entrepreneurship; - regenerative economy;	- business economy; - commerce;
URBAN STRUCTURE + MORPHOLOGY	 - homogeneous mix-use development;	 - steady urban growth;	 - focus on rural development; - pressure off central core;	 - high density core, dispersing towards the periphery;
URBAN DEVELOPMENT HIGHLIGHTS	- integrated informal settlements and economy; - mixed-use development; - waterfront commerce; - well connected public transport;	- sustainable urban development; - green environment; - waterfront gardens; - sustainable mobility;	- rural urban linkages; - community co-op farms; - integrated informal settlements;	- strong physical infrastructure; - mobility; - city life; - high density core; - well connected city; - vibrant urban environment
TOURISM	focus: Kenyan culture - music festivals; - conferences and team building workshops; - group tours; - music festivals;	focus: relaxation - school groups & summer camps; - conferences; - retirement place; - family friendly; - health-conscious;	focus: culinary experience - agrotourism; - ecotourism; - culinary tourism; - local crafts;	focus: party life - aimed at wealthy international tourists; - entertainment; - high end services; - aquarium;
EDUCATIONAL PROJECTS	- tourism management; - vocational training programs; - entrepreneurial programs; - hospitality - event management;	- innovative sustainable energy engineering; - ocean protection research;	- capacity training programs; - eco agricultural research center; - fishing community & research center; - culinary school;	- business management; - tourism management and hospitality research hub;
FUNDING	public	public / private	public / private	private
REGARD FOR LOCAL VALUES	extremely positive	positive	positive	extremely negative
COMMUNITY	cohesion	contentment	cohesion	segregation
LIFESTYLE	trendy city lifestyle	smart living	slow living	pressure for improvement

image 85. Malindi Scenarios’ Diagram

2. MALINDI SCENARIO NARRATIVES

“Storytelling is part of urban design.”
(Childs 2008, 185)

Storytelling connects people as they better understand each other through shared stories (Sandercock 2005, 301), and therefore, it is especially powerful in multicultural contexts. The use of purposeful storytelling in urban planning practice has been increasingly discussed in recent years (Throgmorton 2003; Childs 2008; Sandercock 2010, Isserman and Markusen 2013; Ameen 2017). Storytelling can take many forms, from oral tales to cinematic and multimedia imagery.

Scenario narratives form a platform for connecting urban planning and foresight. They help urban planning in becoming more inclusive, and in making more use of local empirical knowledge. The role of narratives in urban planning is to guide policymakers in the process of making choices regarding resource distribution and project implementations, which, in turn, shapes the future (Isserman and Markusen 2013, 117-118).

Narratives used in urban planning are built from research. In describing how planners use narratives, Ameen (2017) explains:

Most of the recounted events will be real enough, but planning documents tend to involve also conjectured elements, such as claims about what an area will look and feel like in the future. (Ameen 2017, 321)

He further explains that narratives, like stories, involve characters, events, and an environment that undergoes transformation (321). The importance of incorporating “interesting and

believable characters” as well as “settings” in urban planning narratives is also supported by Throgmorton (2003, 127), who also underlies the power of “persuasive storytelling” in planning. The use of characters in scenario planning narrations helps not only present what might happen in different future scenarios, but also the implications of those futures.

The narratives presented by this study formed organically, based on the analysis of the current socioeconomic, urban and cultural situation of Malindi, the SWOT analysis, the project proposals included in the *Malindi Integrated Strategic Urban Development Plan* (ISUDP) and the *International Design Collaboration for Kenya* (IDCK), and the recognized resource opportunities. The narratives combine information learned in the Literature Review and Analysis chapters. They do not describe probable futures; instead, they evaluate possible future situations and form a basis for discussion. Throgmorton (2003) says that “the content of a story depends on one’s purpose in telling it” (127). The purpose of the scenario narratives in this exercise is to reveal how Malindi’s future might develop under certain decisions, and how specific planning priorities could affect the everyday life of Malindi locals.

Inspired by practical experience from her participation in the 2012 *Urban City Cells* Workshop in Shanghai and the 2014 *Gavea Smart Urban Park* Workshop in Rio de Janeiro, the author chooses to create fictional characters for the Malindi scenarios. The scenario narrations are written from the perspective of these fictional characters. This approach brings a human scale to the narratives. It aims to make the scenarios relatable to Malindi locals and policymakers and to be consistent with local empiric knowledge.

1. ENCOURAGING DOMESTIC TOURISM + BUSINESS ECONOMY FOCUSING ON COMMERCE, SERVICE, AND RETAIL

In the first scenario, the main characters, Nelson and Esther, are fictional. However, their background story is inspired by real stories the author has learned from Malindi locals during her previous visit to the town.

2. ECONOMY FOCUSING ON AGRICULTURAL PRODUCTION + ENCOURAGING DOMESTIC TOURISM

The narration of the second scenario is built as an opening speech given during a fictional conference on sustainable environmental strategies. The use of characters in this scenario takes a less important role, but again, framing the context makes the story feel authentic and relatable. All projects discussed in this scenario have been researched to reflect realistic possibilities.

3. ECONOMY FOCUSING ON AGRICULTURAL PRODUCTION + ENCOURAGING INTERNATIONAL TOURISM

The third scenario draws inspiration from real projects:

- The Songhai center in Benin in this narrative is a thriving project initiated in Porto-Novo in 1985 by Father Godfrey Nzamujo. The author learned about this project during a return flight from Dar es Salaam, following her participating in the *Cities in Transition* course in Tanzania in 2013.
- The *Interplay of Cultures* is a course offered by the Department of Architecture at Aalto University. Over the past 25 years, students of the *Interplay of Cultures* course have collaborating with local communities of different developing countries towards building sustainable design solutions to empower their communities.

4. ENCOURAGING INTERNATIONAL TOURISM + BUSINESS ECONOMY FOCUSING ON COMMERCE, SERVICE, AND RETAIL

In the fourth scenario, the main character is the author, 35 years older. This scenario also includes a background story, recalling the author’s real visit to Malindi in 2016, and provides the opportunity for the author to describe the starting point of this work.

SCENARIO 1



2015 was a rough year for Nelson and Esther. They were a young couple expecting their first child, living a content life in the Maweni village¹, in the southwest of Malindi. The house they built there was meager, nothing close to the luxury they saw at the hotels they were working at, but it was home. And both did well at finding jobs: Ester worked as a maid at the renown Diamonds Dreams of Africa hotel, while Nelson had a good business organizing tours for hotel guests. His sister Agnes had married a Swahili man from the Shella village who was a fisherman together with his brothers, and Nelson was able to organize sailing trips on their dhow boats. His brother owned a shop in the curio market where Nelson often took tourists on short trips. And he was still keeping in touch with some of his cousins,

1. The locals refer to the various neighborhoods as “villages”.

Mijikenda farmers who welcomed his tourist groups to their traditional ethnic village outside Malindi, a trip many foreigners were interested in. Nelson was known as an excellent tour guide, and soon he had worked out a deal with the Coral Key hotels in Malindi, bringing his business a steady flow of customers.

But in 2015 both Esther and Nelson found themselves without a job when many hotels in Malindi had to close for several months due to low bookings. Nelson tried hard to partner with other hotels that remained open but was not well received, and hawking for tourists on the beach came with fierce competition. There were so many people without a job in Malindi now, and much fewer tourists to cater to. Nelson and Esther had to get by with casual labor, while Nelson struggled to find something more sustainable. They even considered moving back to the farm

where Nelson’s grandparents lived but concluded that such a move, with a newborn baby, would be too precarious. Besides, they were not trained as farmers. At least in the city they had the hope that wealthy Europeans would return.

In 2017 Nelson found work at the airport expansion construction site. It was only physical labor and limited pay, but it helped them through the low seasons. It also brought them hope, that the tourism business would recover. There had been slightly more stability in the region, perhaps Italians would come back. Watamu town seemed to be flourishing, more and more popular with international tourists, why not Malindi? Nelson did not know this, but at that time, many hotels were on sale. As Tanzania was receiving increasing praise in international media, and on the Kenyan coast Watamu beach was the new hip spot, Malindi was losing customers. This meant business was no longer profitable for Malindi hotels, and many investors sought to sell their shares.

In 2019 the local government took the initiative to redirect Malindi away from its crippling dependency of foreign investment. At that time, international tourism was at its lowest, which provided the perfect opportunity for the government to support the local community’s involvement in the redevelopment of Malindi. The first step was taken in May 2019, when local stakeholders came together and dared to envision a different direction for Malindi, one which would no longer depend on the “wealthy Europeans.” The vision they had was bold, different than what Malindi had been in the last 50 years, and many

participants were understandably skeptical. But this vision had the potential to strengthen the local community, and all stakeholders recognized that Malindi had been given the opportunity to make a change.

After that meeting, the local government stopped investing in the aggressive promotion of international tourism. Foreign investors were not happy, which was to be expected: part of their businesses was supported by tourism campaigns run by local government money. Instead, those funds were now redirected towards programs aimed at integrating informal settlements. Malindi started taking a strong stance towards building the local communities and prioritized settlement upgrading programs.

The government further supported several educational programs aimed at training locals to be more active in managing tourism businesses, with the specific focus of integrating domestic tourism and promoting local culture. One particular program empowered small communities to form around the common goal of running a hotel business. The Federation for the Urban Poor aided offering substantial loans to communities who undertook the tourism management program, enabling locals to invest in buying back hotels or tourism facilities. This change happened swiftly, before the new Malindi airport expansion was opened at the end of 2020: while international tourism was still in decline, and hotel market value was low.

Twelve hotels were bought by local groups with the help of this program in the initial phase.

Some involved Kenyan investors from Nairobi, but even in those cases, local groups owned a minimum of 51% of the shares. Under new ownership, these locally owned hotels made an effort to market themselves in the Nairobi business environment as the perfect location for corporations to organize conferences and team building workshops. The first collaborations were successful, and before long, Malindi started to build a reputation among Kenyan corporations as a preferred location for organizing conferences. Nelson and Esther were skeptical about the hotel management program and did not dare to be involved. However, Nelson's brother-in-law Asafa and some of his cousins were part of the group that bought the African House hotel. They renamed it The Swahili House and redecorated it with furniture made by Malindi carpenters.

At the same time, at the beginning of 2020, several educational programs were introduced in Malindi. They worked predominantly with communities from the informal neighborhoods, offering them training in various vocational trades (carpentry, welding, Swahili fashion design and garment making, product design, mechanic work, dhow boat construction, plumbing, brick construction, makuti thatching, solar and electricity installation), entrepreneurial courses (finance, bookkeeping, marketing, management, networking and co-opetition), hospitality and event management. These programs aimed to harness the economic potential of informal communities, to provide new skills for possible business opportunities, and to improve the economic wellbeing of the local communities affected by the instability of the tourism sector. Nelson signed up for the wood program, taught by a master wood carver from Lamu. He also attended a sales and marketing course specifically aimed at learning how to sell art and crafts. The carpentry training program was not free, but it

was designed in such a way that the attendants were able to finance their studies by selling furniture pieces to the hotels that were now being renovated and redecorated. Nelson learned to use coconut wood to build interior decoration pieces, as well as artwork. The sales and marketing program taught him how to successfully promote his work, and together with a few mates from the wood program, he opened an internet business to display and sell their work. Soon they were shipping furniture pieces to buyers from all around East Africa, and to start-up hotels in Tanzania and Uganda that commissioned large orders from them. Because Nelson was one of the first graduates of the wood program, he was later involved in training new apprentices. The various vocational training programs implemented in the 2020s attracted the young-adults of Malindi who learned practical skills taught in Swahili by coastal trades masters. Many locals became involved in learning new trades and soon started opening businesses in the upgraded informal settlements.

The efforts made towards integrating the informal communities were successful, and settlements transformed into trendy neighborhoods, with cafes, restaurants, small shops, and boutiques. Street life inside the upgraded "villages" was lively, featuring local arts, crafts, and trade goods, and attracted both residents and visitors. In 2027, bike points were installed in various places in Malindi, helping locals and visitors to easier access the town. Furthermore, illumination was installed along the main roads, the market square, and the open social spaces of the upgraded neighborhoods, bringing a sense of safety and security to the city. Maweni neighborhood became the new hipster side in the city, and due to its popularity with tourist visitors, a new local community guesthouse opened there in 2031. Having studied a program on culture

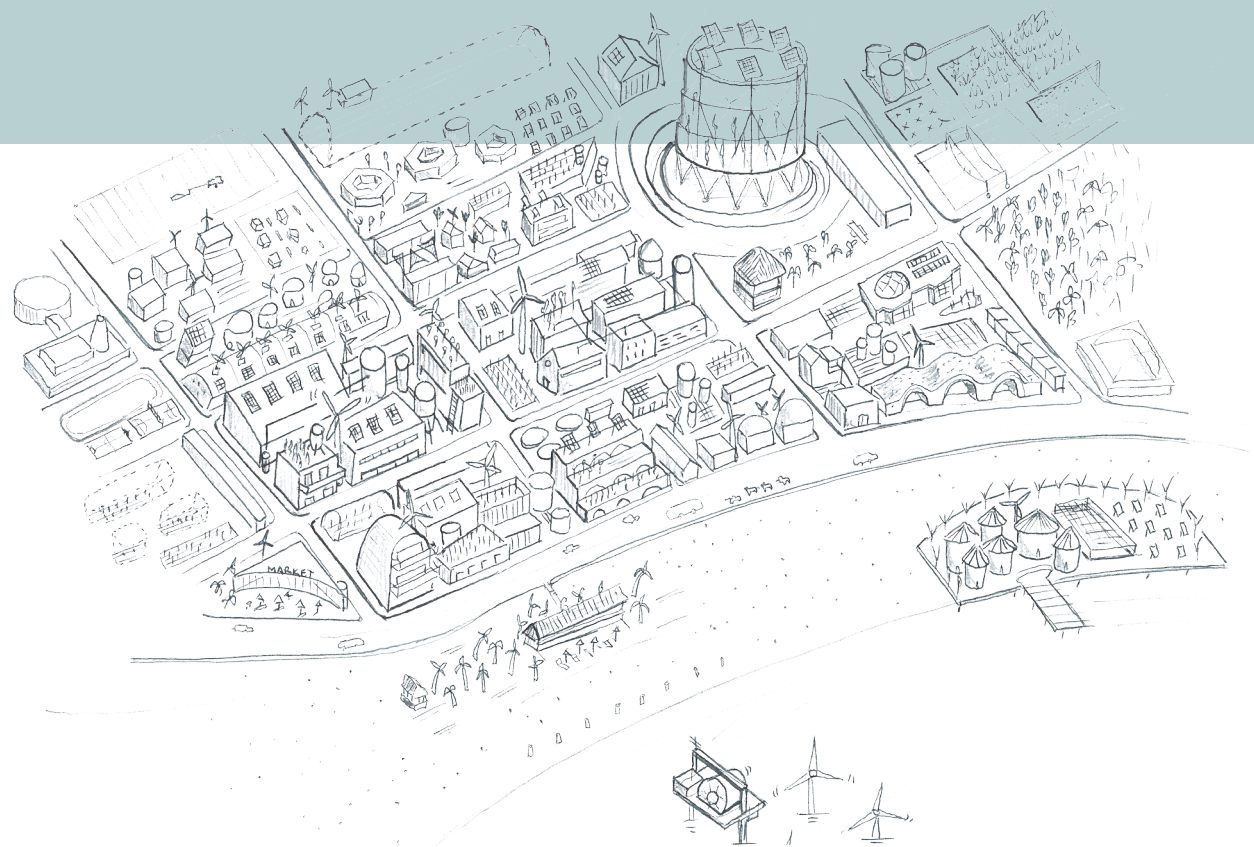
and hospitality, Esther was part of the local guesthouse initiative. The Maweni Guesthouse was not a luxurious hotel, but it offered a warm and hospitable environment and was soon popular with Kenyan families visiting Malindi. In 2036 Nelson and some of his carpenter friends also opened a furniture shop inside the Maweni neighborhood. Their businesses thrived through co-opetition.

Also during the early 2020s, the revitalization of the waterfront along the Malindi Beach started. The project began small and expanded gradually, combining suggestions generated by the 2016 *International Design Collaboration for Kenya* Competition proposals. In the first stage, special attention was given to redesigning the public beach. The area along the Silversand road developed community open spaces, incorporating landscape for recreation, social life, and sports. The focal point of this new development was the Silversand Gardens, an area of public gardens and open spaces that created the link between the land and the ocean. In the daytime, the Silversand Gardens become a place for relaxation, with quick access to the sporting fields, the beach or various artisan shops. In the evenings, the gardens turn into a vibrant street food market: a public meeting place with open-air restaurants selling freshly grilled seafood and various local drinks and dishes, over a background of Swahili music, a scene that brings together both residents and visitors. Malindi Beach project expanded with the development of a continued promenade along the beach, which now includes the sports fields, a playground, cycling paths, beach trails, and various commercial spaces for small shops and cafes. By 2029, the beach promenade stretched from the fishermen village to the Vasco da Gama pillar observation deck. The walk was supported by biking routes connecting it to hotel beaches. The entire promenade was lit with solar lighting,

which enhanced the visitors' feeling of safety during the evenings. By 2034, solar lighting along the beach was extended to cover the southern side of Malindi, down to Casuarina beach, and by 2037 lighting also extended to the north beach, beyond the fishermen village. Malindi pier was restored, expanded, and developed into a modern wharf.

The beach close to the Silversand Gardens is now the highlight spot for cultural festivals and beach sports tournaments. Malindi actively promotes local cultural activities to attract upcountry visitors who come to seek relaxation and entertainment inspired by Kenyan culture and values. Every year, Malindi organizes the *Malindi Music Festival for Children*, which raises funds for early childhood education; the *Swahili Music Festival*, which brings together artists and visitors from the entire Swahili region; and the *Kenyan Beach Games* event which features a full week of sports, including a beach volleyball tournament, a football tournament and a half-marathon. In the spring, Malindi also hosts a Bao Games tournament. In 2034, the Swahili Culture House opened, and it included both a small Swahili history museum and an art gallery.

By 2055 Malindi developed into a trendy, lively town, with a stable economy and a vibrant urban environment. Malindi became the holiday location of choice for many visitors from Nairobi or Kampala, and the trendiest location for African companies to organize conferences. The former image of Malindi as an upscale international acclaimed tourist destination faded, but the locals are content with its strong community cohesion influenced by the mutual collaborative effort in rebuilding the town around local values.



SCENARIO 2

October 6-11, 2054 - Malindi, Kenya
SDEWES International Conference
Opening Welcome Speech

Prof. George Okoye Krhoda,
Chair of the Board of Directors
Malindi Institute of Environmental Strategies

Ladies and Gentlemen,
I am pleased to welcome you all to the 21st
Conference on *Sustainable Development of
Energy, Water, and Environment Systems*.

It is a great honor for the city of Malindi to be
hosting the SDEWES conference this year. I
am particularly grateful to see this impressive
turnout of participants from Africa present this
year, which can only underline the importance of
environmental education for our continent.

To set the stage for this year's conference, I am
here to welcome you to Malindi by sharing the
progress our city has made towards fostering
sustainable urban development and revealing
some ongoing research we are conducting for
further improvement.

Less than 40 years ago, Malindi was very far from
where it stands today. The town's infrastructure
was degrading, the environment was suffering,
and the economy was crippled. The turning point
for Malindi was when its people acknowledged
the importance of the environment's wellbeing in
our city.

Already in the early 2000s, Malindi residents were
aware of the serious environmental concerns

regarding our city. However, it was only roughly
two decades later when they started taking concrete
measures to solve those problems. In April 2019,
the County Government of Kilifi initiated the
first general cleanup of the town, under the motto
“*Malindi - my Town, my Responsibility*.” Later
that same year, the city of Malindi prepared its 50
years' vision, *Eco-City Malindi 2070*. Introduced
in late September 2019, the *Eco-City Malindi 2070*
vision described Malindi's goal to transition to a
green city, relying entirely on renewable energy
by 2070. Now 35 years later, this vision still is
the foundation of all ongoing environmental
sustainability projects in Malindi, constantly
pushing current generations to meet their
needs without weakening the capacity of future
generations to be able to do the same. The decisions
made in 2019 about energy, water management,
environment systems, urban infrastructure, and
city planning paved the way to achieving the
decarbonization of the Malindi municipality.

In November 2019, Malindi became the first
town in Africa to require solar panels installed
on roofs of all renovations or new construction
projects of governmental, industrial, and
commercial buildings. The decision went into
effect on January 2021.

In the early 2020s, Malindi invested heavily in
developing the Malindi Research Center for
Environmental Science. The center was built in
two stages: the main station hosting the Malindi
Institute of Environmental Strategies, which
researches environmental sustainability, climate
change, and sustainable technologies, launched
in 2023; the ocean protection station hosting the

Malindi Marine and Fisheries Research Institute
opened in 2025. The Malindi Research Center for
Environmental Science became an incubator for
experimenting new technological developments
in the field of environmental science.

The Malindi Institute of Environmental
Strategies focuses on exploring alternative energy
production (such as wind and solar energy, tidal
power production, rainwater harvesting) and
ecological agro-industrial solutions. Rainwater
harvesting systems stated to be tested and
implemented in Malindi already in the late 2020s,
followed by the development of smart water
storage systems in the early 2030s. Green roofs
and vertical greenery systems were researched
and tested in the late 2030s, increasing urban
food growth. In 2046 Malindi became the first
town in Africa to require greenery systems to be
integrated into all new construction projects of
governmental, and commercial buildings.

Tidal power production research also began in
the late 2020s, working in parallel with ocean
protection studies. Today, Malindi's tidal array is
feeding into the Kilifi County's power grid. The
five turbines standing like windmills on the ocean
floor of Malindi Bay generate enough renewable
energy to power over 4500 households. During
the last decade, we've also worked hard on
maximizing solar energy harvesting. With the
use of solar power, we've expanded street lighting
to all areas of the town, an achievement we've
reached earlier this year. We are currently working
on implementing solar-powered street lighting
also to more areas within the municipality.

Research into agro-industrial ecological solutions led to sustainable industrial developments. Malindi municipality has about 32,000 hectares of agricultural land. Out of these, 2,300 hectares are inside Malindi town. The main agro-industrial eco developments in the Malindi municipality focus on cashew milling, sand, cassava, mango, and coconut milk production. Farming is also supported by new processing units, developed under careful environmental considerations.

And here I will mention two leading local companies which have made impressive efforts to collaborate with the Malindi Institute of Environmental Strategies towards building socio-environmental sustainable industries: the CashewNutter company, which promotes the concept of handcrafted nut butters made from locally produced and locally roasted cashews; and the MalCoconut company, which uses only locally sourced ingredients in all coconut-based products and works hard to ensure minimal wastage. On the 3rd day of the conference, we are organizing a tour of the cashew and coconut farms, and we will discuss more about sustainable agro-industrial solutions. Through sustainably approaching industrial farming, Malindi intends to protect farmers from being exploited, to safeguard the environment, and to promote a circular economy with green economic growth.

The ocean protection station of the Malindi Research Center for Environmental Science opened in 2025, two years after the main station. It focuses on studying the impact of both fishing practices and underwater infrastructure developments on the marine ecosystem and aims to protect the ecosystem of the coastline and to defend Casuarina Beach from erosion. Malindi Marine and Fisheries research institute joined the ocean protection station in the early 2030s, studying sustainable fishing and mariculture

techniques, which ensure that seafood is fished with minimal deterioration of the marine environment. The research institute works in close collaboration with the local fisherman community, continuously improving artisanal fishing techniques and testing new methods for efficient and sustainable mariculture. They advocate for the use of fishing techniques which cause less stress on the marine environment and maintain healthy stocks of fish, such as cast-net fishing, hand line fishing, the use of smaller boats, or hunting for certain fish species during specific times of the year.

In the late 2030s, Malindi invested in building a new fish market to serve the fishermen community. The construction was designed to maximize the use of sustainable technologies. The new fish market uses biodegradable materials, is fully powered through renewable electricity generated by Malindi's tidal array, and integrates dry toilets, cool roofs, rainwater harvesting, and greenery systems. The building includes fish landing spaces, storage facilities, and a community meeting space.

Combining the concepts of renewable energy with ecofriendly industrial farming, Malindi launched a biogas project for farms in 2026. The aim was to build a network of decentralized biogas energy from farms, thereby promoting the bio and circular economy, utilizing waste, and improving nutrient cycling. The first biogas plant was ready in 2028, producing enough energy to cultivate its 800 hectares of farmland, as well as selling surplus electricity to the Kilifi County's power grid. Today, most local farms use biogas technology to produce power and natural fertilizers. Larger biogas plants provide their surplus electricity to the local grid, contributing towards powering 10,000 to 12,000 rural households. Using biogas digesters in commercial farms significantly

improved the nutrient cycle and reduced the use of artificial fertilizers.

In the early 2040s, Malindi invested in building the Sabaki recycling plant, which processes waste from the entire Kilifi county. The plant aimed to maximize the recycling rate of the Malindi municipality. Recycling initiatives among residents in Malindi started already a decade earlier, but without a proper facility, the early efforts were unsustainable. The Sabaki recycling plant was completed in 2046, combining innovations developed with the support of the Malindi Research Center for Environmental Science. Malindi residents sort bio, paper, cardboard, plastic, metal, glass, and textile.

In the last 35 years, not only has our city prioritized building a sustainable future through investing in renewable energy sources, promoting recycling, and building a circular economy, but it has also invested in the wellbeing of its citizens and its natural environment. In the late 2010s, Malindi's largest park was a leftover patch of land resulted from the intersection of three main roads. However, already in the early 2020s, the city planning department made efforts to open up more land for recreational purposes building new playgrounds, sports facilities, playfields, and promenades. In the late 2030s, Malindi invested in developing the waterfront Silversand Gardens and redesigning the public beach.

One of the prominent changes Malindi's economy faced in the late 2010s was the rapid decline of the international mass tourism industry. At that time, most of Malindi's economy focused on catering to foreign tourists. However, the city's international tourism industry had been in decline already since the early 2000s. Unexpectedly, Malindi embraced this change in tourism trends, moving away from mass international tourism and

aiming towards a more sustainable industry. At the end of the 2010s, many hotels were closed, and several owners were looking to sell their proprieties. In the early 2020s, the new local legislation regarding sustainability became one more reason for hotel owners to trade their investments. These circumstances provided local investors the opportunity to purchase back foreign-owned hotels.

Today, the tourism industry aims to welcome school groups interested in learning about sustainability, African families looking for relaxation, and international conferences focusing on environmental awareness. Malindi is also a choice retirement place for both Kenyans and internationals and a preferred destination for East African summer school camps.

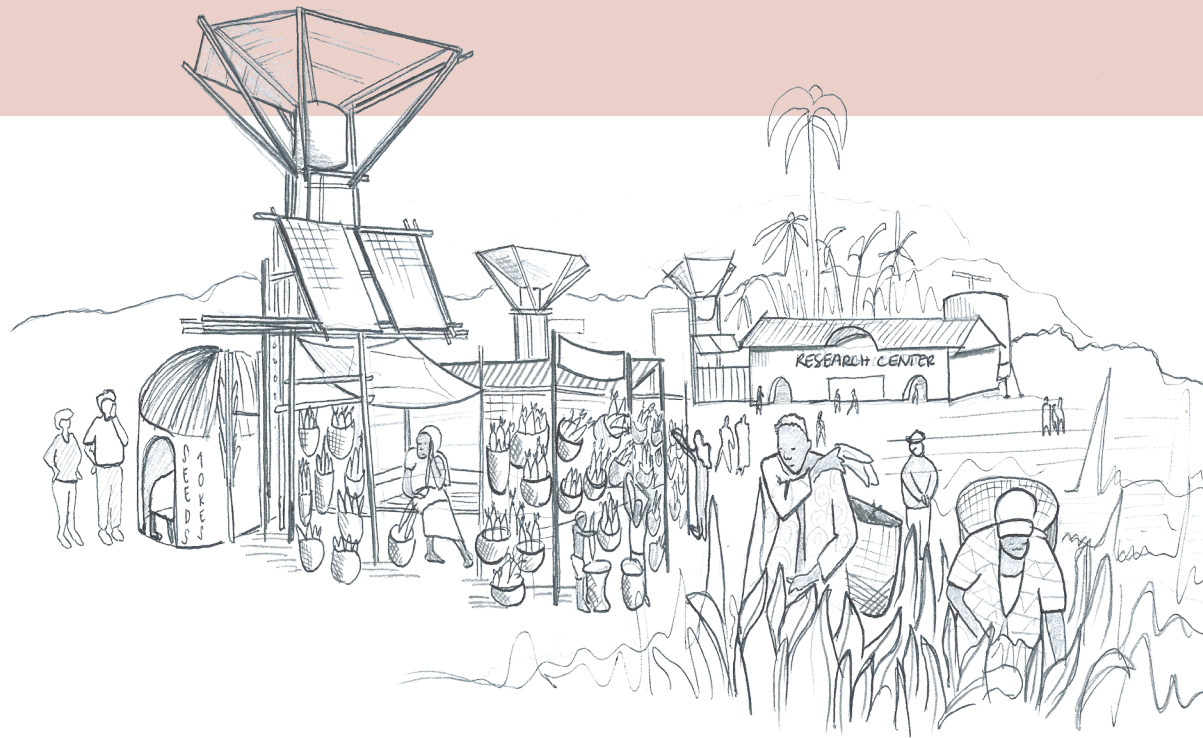
Our main ongoing projects focus on building sustainable urban mobility and integrating smart city solutions. Last year we introduced electric tuck tucks in our city, which accommodate city tours with a green footprint. This year we are working on providing free public wifi connection throughout the city with the use of solar energy. We are currently also testing technological applications in waste management and urban mobility.

I do not think there is a need to further stress the importance and positive impact of the environment's wellbeing in our societies and our cities. This workshop will undoubtedly contribute to fostering sustainable urban development.

I look forward to listening to all the presentations this week, and I expect we will engage in fruitful discussions furthering the development of environmental education.

I wish you all a very successful conference.

SCENARIO 3



After completing his masters in Microbiology and Sustainable Development in the Netherlands, Jackson spent 18 months at the Songhai Center in Benin deepening his knowledge in agricultural entrepreneurship and building leadership skills. His training in Benin was inspiring, and Jackson returned to Nairobi in spring 2019 motivated to replicate the Songhai model in a Kenyan community. He reached out to Jabari, his high school friend, who had also been fortunate to pursue higher education, having studied social sciences in Nairobi. Because his family was from Malindi, Jabari was well familiar with the town's recent struggles and suggested adapting the project to benefit Malindi.

Jackson and Jabari built a proposal for developing a socioeconomic project aimed at rejuvenating Malindi's rural communities and inspiring motivation through training programs focused

on sustainable agricultural production and human capacity building. Their vision to replicate the Songhai model in Malindi, aiming at bringing back dignity into farm work, developing human capacity, and raising the standard of living of poor communities, received funding from the UN Development Program. Furthermore, the local government offered them five hectares of agricultural land on the north side of the town, close to the Galana-Sabaki River. Together with a group of Jabari's local friends, they started developing the Sabaki Farming Research Center in September 2019.

For the development of the main buildings and facilities, Jackson collaborated with Finland's Aalto University's Sustainable Global Technologies program. In spring 2020, a team of multidisciplinary students of the *Interplay of Cultures* course visited the land at Sabaki

farm, studied the local building traditions, and proposed designs for the development of the research center. Some facilities started to be built right away: a biogas digester plant, temporary storage facilities, composting dry toilets, and an irrigation system drawing water from the Sabaki river. The following year, another group of students further developed the project and prepared the technical drawings of the main buildings: offices, living quarters, teaching rooms, workshop rooms. The designs were based on local building traditions, used local materials, and incorporated the use of sustainable technologies, such as rainwater and solar energy harvesting, and biogas energy production. The construction was funded by the European Development Fund.

Parallel to the development of the building facilities, Jackson's team started planting and harvesting the land. They aimed to research and promote sustainable farming as well as optimal agricultural production. The first challenge was to discover which and how crops were most productive with the coastal soils. They learned that most local farmers lacked adequate agricultural training and financial capital, which limited their choice of production. The Sabaki Research Center became an incubator for agricultural experimentation and technological development. It combined traditional and modern farming methods and tried to adapt them to the local context, ensuring affordability. Jackson's vision for Sabaki farming was to create a zero-emission agriculture framework, by combining crop development with animal production and using animal waste for biogas and farming compost. The research also extended to developing a self-

sufficient farming system.

In 2023, the Sabaki Farming Research Center was inaugurated and started offering courses to local students. Following the positive growth and the excellent harvests of the first years, the local government provided full support, financing training for locals interested in developing knowledge in the field of agricultural entrepreneurship. Scholarships included food and boarding. During the various six to eighteen months of training programs, students learned about sustainable farming practices (rotational farming, mix cropping, zero-emission production), as well as using and building technologies to enhance production. Apart from agricultural training, students received knowledge in environmental, social, technical and economic fields. This enabled them to raise their production capacities, foster creativity and innovation, and, ultimately, to overcome poverty.

Successful students received loans empowering them in effectively starting production on their own farms. They built a network of former Sabaki trainee farmers, sharing knowledge and experience, working together to find solutions to problems and to sell their products. The research center offered them technical support, equipment rental possibilities, marketing advice, and veterinary services. In 2025, the Ministry of Agriculture visited the Sabaki Research Center and was pleased with the development of the region. As a result, the local government increased their land to 18 hectares. The Sabaki Center's economic returns from selling produce enabled them to expand the program, hire more

farmers, welcome more students, train more people and further the research. As the farming community raised human capacity, they were able to produce better and increase resources.

The Sabaki Research Center was the central focus of the redevelopment of Malindi, bringing hope and pride to the local communities who became more self-reliant. The young farmers who trained at Sabaki Center further contributed to the sustainable development of the suburban communities of Malindi. As the town developed more inland, the pressure was taken off the overcrowded neighborhoods in the city center, and the government was able to effectively intervene in the informal settlements with upgrading and re-blocking projects.

The center continued to research and develop farming tools and technologies, soil regeneration techniques, machinery designs and mechanizations, and systems for energy production and recycling. By 2050, the training programs expanded to include crop production, animal farming, butterfly farming, food processing, silk production, machinery design and innovation, renewable energy production, hospitality, restaurant management, handicraft entrepreneurship, agribusiness management, fishing techniques, and boat building.

One of the first students who joined the Sabaki training program was Nelson. His grandparents owned one hectare of agricultural land near the Sabaki farm. In 2016, undergoing financial difficulties, Nelson had already considered leaving Maweni village in the southwest side of Malindi to move to his grandparents' farm, but acknowledged that he did not have the necessary agricultural training. When the Sabaki Research Center opened in 2023, Nelson first enrolled in the six months program, hoping to learn practical

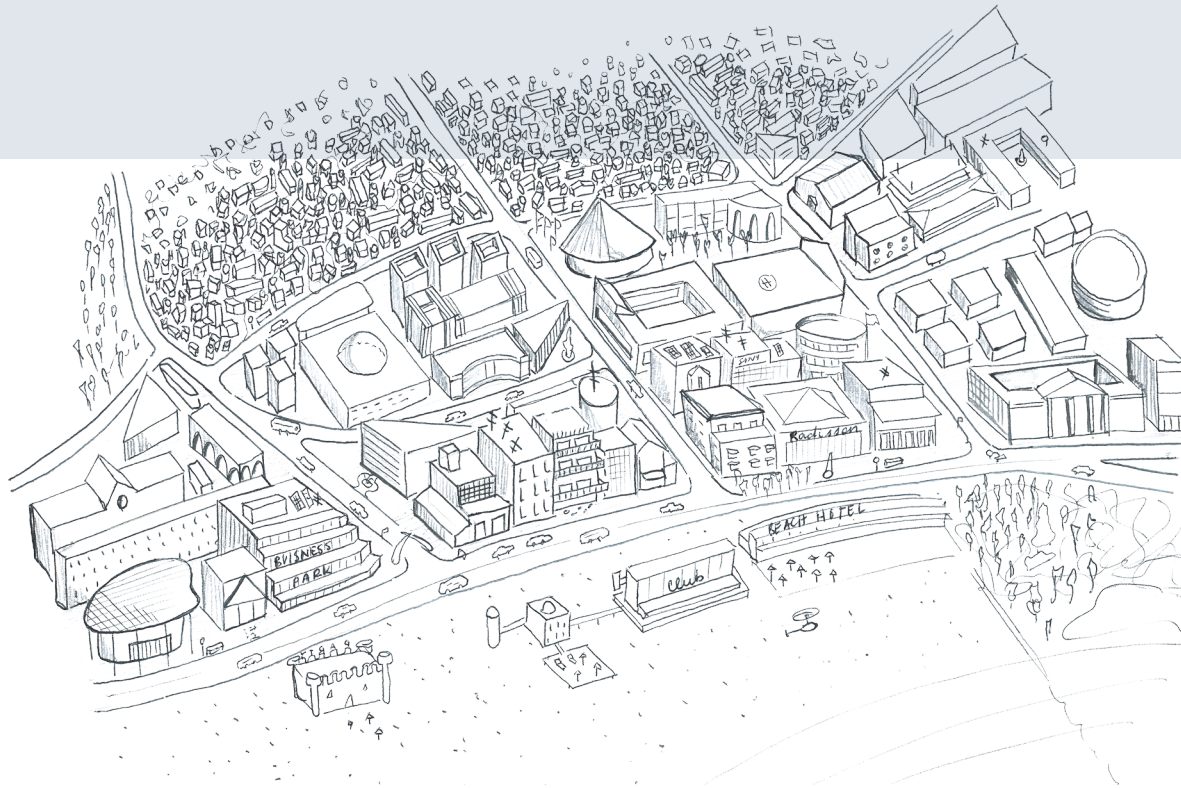
methods of farming. He soon understood the value of agricultural entrepreneurship and innovation and continued to study the full eighteen months program relocating his family in Sabaki. He was part of the first generation of trainees. After finishing the training program in 2025, Nelson started planting on his grandparents' farm using the farming methods learned at Sabaki, while also working part-time for Sabaki center, teaching new trainees. Because the Sabaki Research Center received increasing international acclamation, many visitors were interested in experiencing the Sabaki farming model of mixing traditional agriculture with innovation and sustainable technologies. In 2029 Nelson's wife Esther attended the new hospitality program. Together they built a small guesthouse on their farm and started to welcome agrotourism.

In 2027, Jabari started a satellite project working with the Malindi fishermen community. He received funding to build a center serving the fishermen community, which included fish landing spaces, a boat building workshop, storage facilities, and a community meeting space. The Malindi Fishing Center organized algaculture training workshops, researched and tested sustainable methods of mariculture, and experimented with methods of improving artisanal fishing techniques. The fishing center was developed at the north end of Malindi Beach, behind the Curio Market. When the fishing community center was being built, the revitalization of the Malindi Beach waterfront was almost ready. The project combined suggestions generated by the 2016 *International Design Collaboration for Kenya* competition proposals and developed the area along the Silversand road into a beach promenade which incorporated community open spaces, a landscape for recreation, social life and sports. By 2027, the

beach promenade stretched from the fishermen village to the Vasco da Gama pillar observation deck. The walk was supported by solar lighting, which enhanced the tourists' feeling of safety during the evenings. The focal point of the promenade was the Silversand Gardens, an area of public gardens and open spaces that created the link between the land and the ocean. The Silversand Gardens also included a tourist info center, which guided tourists to various activities and highlights of the Malindi region: the heritage sites, the mangrove park at Midia Creek, the tourist Curio Market, and the Sabaki Research Center.

In 2027, the Sabaki Center opened a food shop in Malindi, where former trainees came to sell their produce. This project assisted the development of social links between farmers and urban consumers and strengthened the advancement of

a circular economy in Malindi. The farmers were able to better understand the town's consumption patterns and to respond to local needs, and now the local community mostly uses local resources. Some produce is also used for export, but foreign trade is governed by fair trade laws. During 2027-2029, the Sabaki Center collaborated with a Swiss culinary school who sent trainees to Malindi to learn from and work together with Kenyan chefs towards experimenting with and creating new recipes from local produce. Malindi chefs attended culinary workshops, learning how to create more delicious dishes using local roots and vegetables. This action was successful, and in a short time Malindi started to be known for its culinary flavors. Malindi became a popular culinary tourism destination in East Africa and a welcoming location for family travelers.



SCENARIO 4

Malindi, 29 February, 2052.

My dear Elena,

I have not forgotten the pact we made in our youth to never plan a holiday in the same country twice. And so far, except for work-related travels, of course, I have kept my deal. But this spring, as I am now confessing, my recent 65th birthday provided an excellent excuse to travel to Kenya for a second time.

Do you remember my Aalto master's thesis? The project with scenario planning proposals for the development of the Malindi town in the Kenyan coast? For some years already, I've been curious to see how the city has grown. This week I traveled back to Malindi to experience how the town has developed over the last 35 years.

I probably told you about this already, but I will refresh your memory about my involvement in Malindi. In 2016 when I was looking for a subject for my masters' thesis, I came across the *International Design Collaboration for Kenya* competition. The competition asked the participants to develop an urban design proposal for one of nine different middle-size towns in Kenya. One of the competition sites was situated in Malindi, a coastal town north of Mombasa. In the competition brief, Malindi town was introduced as a popular, attractive tourist destination, with rich Swahili history and an economy focused on tourism, trade, and commerce.

I traveled to Malindi in February 2016, inspired to discover a thriving touristic destination. To my surprise, I found the city significantly different than what I was expecting. Most high-end hotels were separated from the rest of the town. They

were built as enclaves, behind high walls and closed gates, segregated in the southern part of the town along the Silversand road, surrounded only by more hotels and private holiday homes. At the time of my visit, many hotels were closed, and vacation homes were empty. The hotels I found open had little guests. The water along the beach was murky brown, and the beaches were austere: tourists remained inside the hotel perimeters and used the hotel pools for swimming.

I visited the local tourist market and found myself alone among the shop owners who were desperate to make a sell. They call it *hawking*, trying to convince tourists to buy something. I talked with a woman who was making bracelets. She was not originally from Malindi: she had moved there several years back together with her husband, and she used to have a thriving business with her curio shop. But it was clear to me that was no longer the case. Her shop was overstuffed with handcrafted souvenirs, and there was no one there to buy them. I asked her about the low number of tourists, and she told me that had been the situation there since the 2014 shootings in Lamu. Her business had not been profitable in the past two years. I asked her if she considered moving back to her village, but she felt invested in her shop and hoped that tourists would come back. So she kept making souvenirs. I could not escape the feeling that the town was in a standstill.

During my short stay in Malindi, I interviewed a local county trustee of the Kenya National Union of Teachers, Mrs. Agnes. She informed me about the inadequate level of education in her district, the limited scholarship and study opportunities,

the low attendance rates, the students dropping out of school to work in the informal tourist market, the prostitution, the drug abuse and the young adult generation being unequipped for answering the economic crisis created by the decline in tourism-related jobs. Nothing of what Mrs. Agnes described to me had been mentioned in the competition brief, so I returned home puzzled by my experience. I started to research the socioeconomic condition of Malindi and found out that my assessments had already been signaled by other writers, and at the same time, the media was raising constant concerns.

In 2019, I shared my thesis with the Malindi city planning department, and we exchanged discussions about my multiple visions for Malindi. In the end, the town was not ready to make a radical change. Instead, the town's strategy was to continue to promote international tourism (because the Malindi residents believed it would bring them the most substantial revenues) and to support the locals in being more actively involved in tourism management. The local planners viewed urban densification as a strategy for sustainability, since it promotes connectivity and accessibility, and requires less land and energy.

During the first decade, the local government focused heavily on infrastructure development. The change is clearly visible today. The general road quality has improved considerably. Not all roads are paved already, but certainly a lot more than before, and especially the streets of the inner city. There is also far less garbage on the side of the roads. I remember the locals started waste management actions already the summer

I was finishing my thesis, and I am happy to see Malindi is now a cleaner city. Furthermore, there is now illumination along the main roads, the market square, and the central business district. I think this brings a sense of safety and security to the city. Finally, the traffic inside the city has improved considerably after the development of the ring road which connects Mombasa to Lamu via Malindi, bypassing the inner city.

Malindi also advanced the opportunities for upper education and opened new schools for business studies teaching business, finance, accounting, economics, entrepreneurship, shopkeeping and logistics, international marketing, public relations, management and business structure, networking, and co-opetition. In 2026, Malindi launched a research and education center for tourism and hospitality management studies. The main campus was built in three stages in the north side of the city, and now the business district has shifted towards the north, developing around the tourism school. I spent the entire afternoon in that part of Malindi yesterday. I was happy to see the area buzzing with restaurants, shopping, and city life.

In the 1940s, the tourism research education center started to receive international recognition. I have heard that Malindi hosted the International Tourism and Hospitality Management Congress in 2048 and the Tourism Innovators Summit last year. The school now also attracts international students, and it is especially popular with East African students. I believe that the town's investment into upper education has made a significant impact on the shaping of the city, encouraging and supporting many business initiatives. Furthermore, locals now hold a significantly higher portion of management positions in the hotel and hospitality industry. This is very different than in 2016, when most hotel

management positions were taken by foreigners.

What struck me the most about Malindi during this visit is how accessible the city has become. I remember that back in 2016 I spent over 20 hours flying to reach Malindi, but now, with the direct Finnair flight, Malindi is only nine hours away from Helsinki. Malindi airport expanded to welcome international flights in 2022. It was a substantial investment, but it generated considerable jobs during Malindi's economic crisis at that time.

35 years ago, I also had a hard time finding my way around the town: there were no maps and no official busses or taxis, and as a solo traveler I frequently felt unsafe catching motorcycle rides. However, in the 2030s, Malindi developed the Explore Malindi app, which connects tourists with local drivers, a local version of Uber. The app includes a section on local activities that tourists can sign up for, such as fishing, diving, exploring mangrove forests, as well as recommendations for local bars, restaurants, and other entertainment. Furthermore, Malindi now has a tourist information center, located inside the tourism management school campus and run by the students. It is open every day, the staff is friendly, and they give out information about the city and its attractions, the different walking and cycling trails, and what can be visited in the nearby towns.

Tourism did not boom immediately after the opening of the airport's international terminal. However, Malindi's active efforts in modernizing the local infrastructure combined with the opening of new attractions and followed by aggressive marketing and urban branding campaigns led to the city repeatedly receiving positive reviews in international media. The Wild Waves Waterpark opened in the late 2020s,

followed by the Arabuko Adventure Trail in the Arakubo Sokoke forest and the Wet and Wild Splashpark in the early 2030s. Of course, these investments did not change the fact that the vast majority of Malindi hotels continue to be foreign owned, and therefore the biggest revenues from the tourism industry are not handled by locals.

Nevertheless, the modernization of the city rejuvenated the tourism industry, and with that, the local economy. The number of tourist arrivals improved within the decade following the airport expansion. Malindi started to regain international recognition, competing for European tourists with Asian sun and sand destinations. In the late 2030s and 2040s, Malindi became a popular holiday destination again, achieving economic rejuvenation and urban growth. Malindi is known today for being a luxury beach destination, featuring various entertainment opportunities and being close to African safari adventures.

It troubles me that Malindi's economy continues to rely intensively on tourism, building on the assumption that tourists will always come. A considerable amount of new businesses focus on entertaining tourists or catering to local needs created by the presence of tourism in the city. But today the world is increasingly concerned about climate change and the impact of air travel on the environment. As a result, in recent years, international tourism has been in decline. How far longer will Malindi be able to prosper from international tourism?

Moreover, the rapid economic growth Malindi experienced in the late 2030s has again lead to an increase of in-migration of upcountry population. I believe that this time the city was more prepared to manage rapid urban growth than it was in the 1980s. Some parts of Malindi seem to be exceptionally thriving. There are now a

few apartment housing developments in the inner city, especially near the tourism management campus. There is also a new neighborhood that developed close to the Wild Waves Waterpark (from what I remember, that area was mostly agricultural lands 35 years ago). However, at the same time, Google Image shows new informal settlements forming in the city. The biggest ones are in the Barani neighborhood (behind the new business district), and another south-west of Maweni. The city will have to react soon to issues created by rapid urbanization. Malindi already tried to address urban informality in the late 2020s, but those interventions seem to have been unsustainable.

In 2016, Maweni *village* (this is how locals refer to neighborhoods) was an informal settlement developing in a strategic area: close to the city's business district, and with direct access to the southern region of hotel developments which stretch along Casuarina road. Houses were constructed without building permits or planning regulations, the streets were narrow and could not even fit motorcycles, and the dwellers had no access basic utilities (water, sanitation, energy). I revisited Maweni early this week and met Nelson, a local spokesman, who was kind to walk me through the neighborhood. He told me how, in the late 2020s, the *Slum Dwellers United Federation* made efforts to improve the quality of living in Maweni village through in-situ upgradings. This helped the neighborhood for a little time, but ten years later, Maweni received a new influx of residents: houses started to expand vertically, further densifying the zone and disregarding the need for proper lighting, ventilation, access, and public space. Maweni is starting to become overcrowded.

Another feeling I got while visiting various parts of the city is of increased segregation. The

Shella village, located in the middle of the city, has become an enclave of Muslim culture and Swahili tradition. The Shella residents seem to shut themselves from the rest of the city buzz, not wanting to associate with the pressing modernization and westernization of the city. On the southern side of the city, the hotel development area stretching along the beach also remains segregated from the rest of the city, an enclave of hotels, holiday homes, and high-end restaurants.

This is about all I can say for now. Tomorrow I plan to visit some of the newer informal settlements. But I'll end my letter on a good vibe, and say that there are now several excellent restaurants in Malindi, some spread along Casuarina road, and some are in the north side of the town. I'm staying again in the southern side, which has a bit too much of a party vibe for my taste, but they do make some mean cocktails at the Sandies Tropical Village (two hotels south from where I'm staying), so I cannot complain.

Sunny greetings from Malindi,
/Maria



SCENARIO 1

SCENARIO ANALYSIS

1. SWOT ANALYSIS

The *SWOT Analysis* identifies strengths, weaknesses, opportunities and threats for each of the four different scenarios.

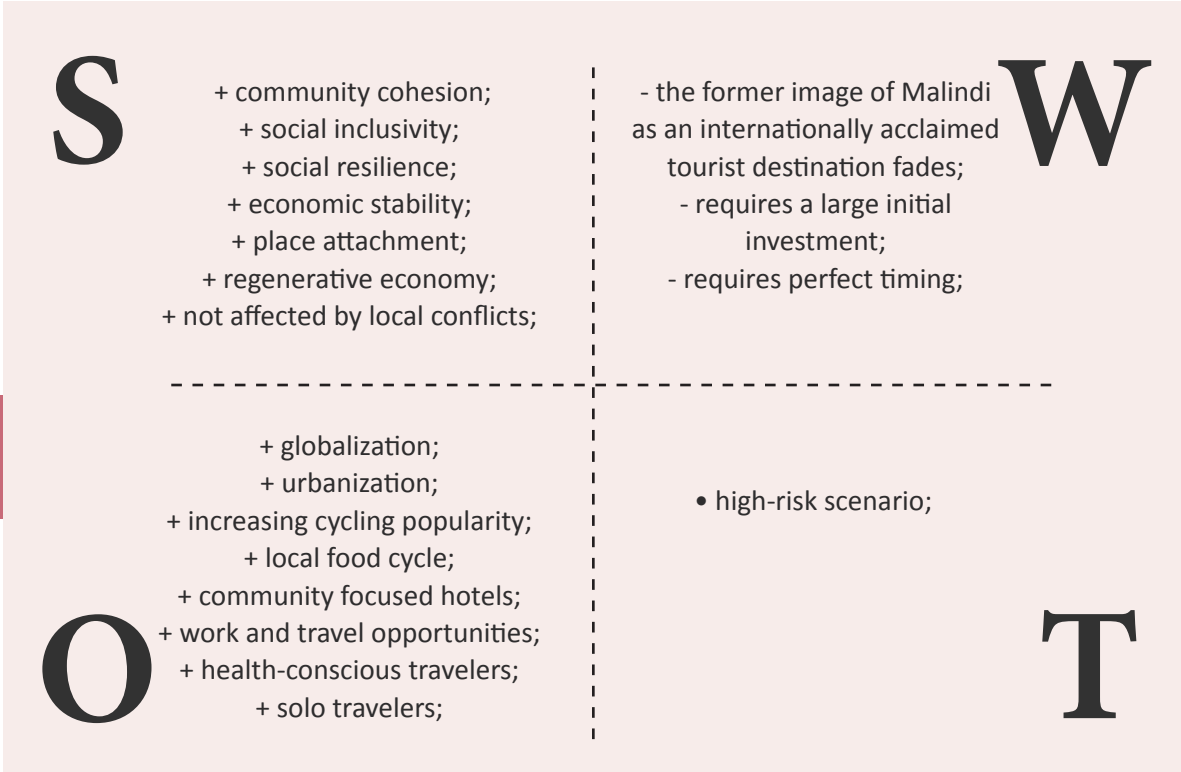
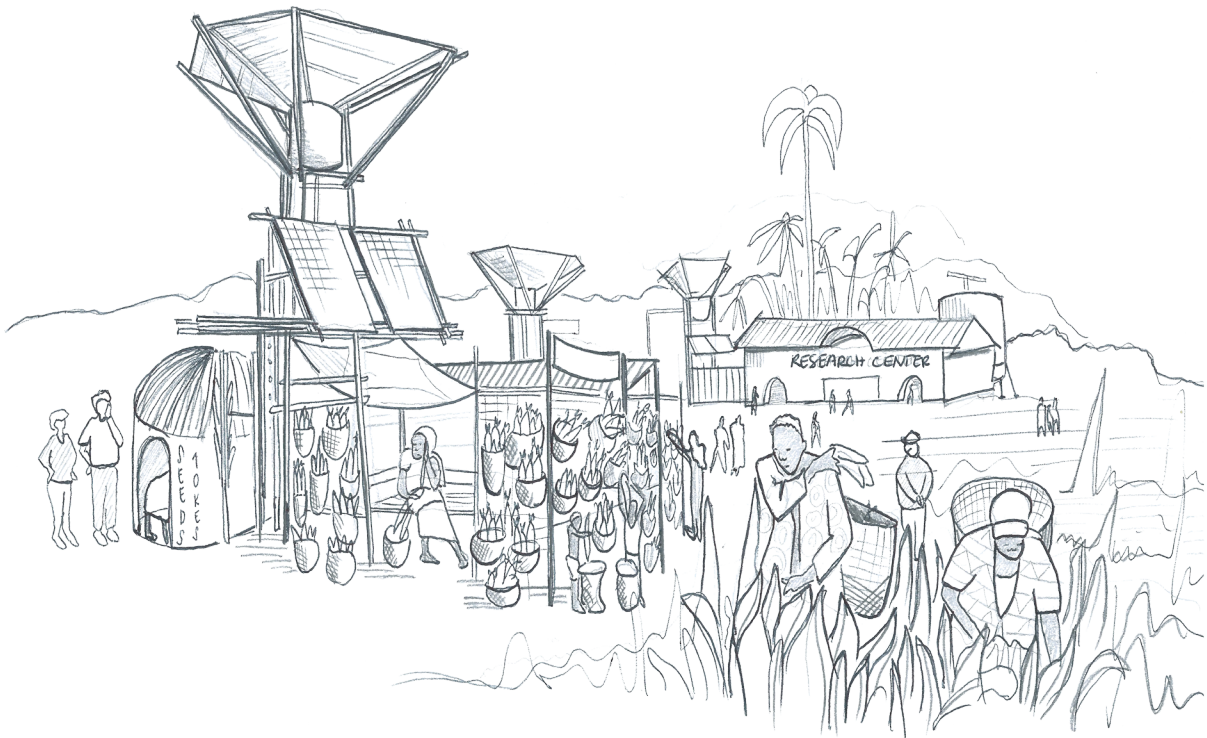


image 86: SWOT Analysis for Scenario 1

SCENARIO 2



image 87: SWOT Analysis for Scenario 2



SCENARIO 3

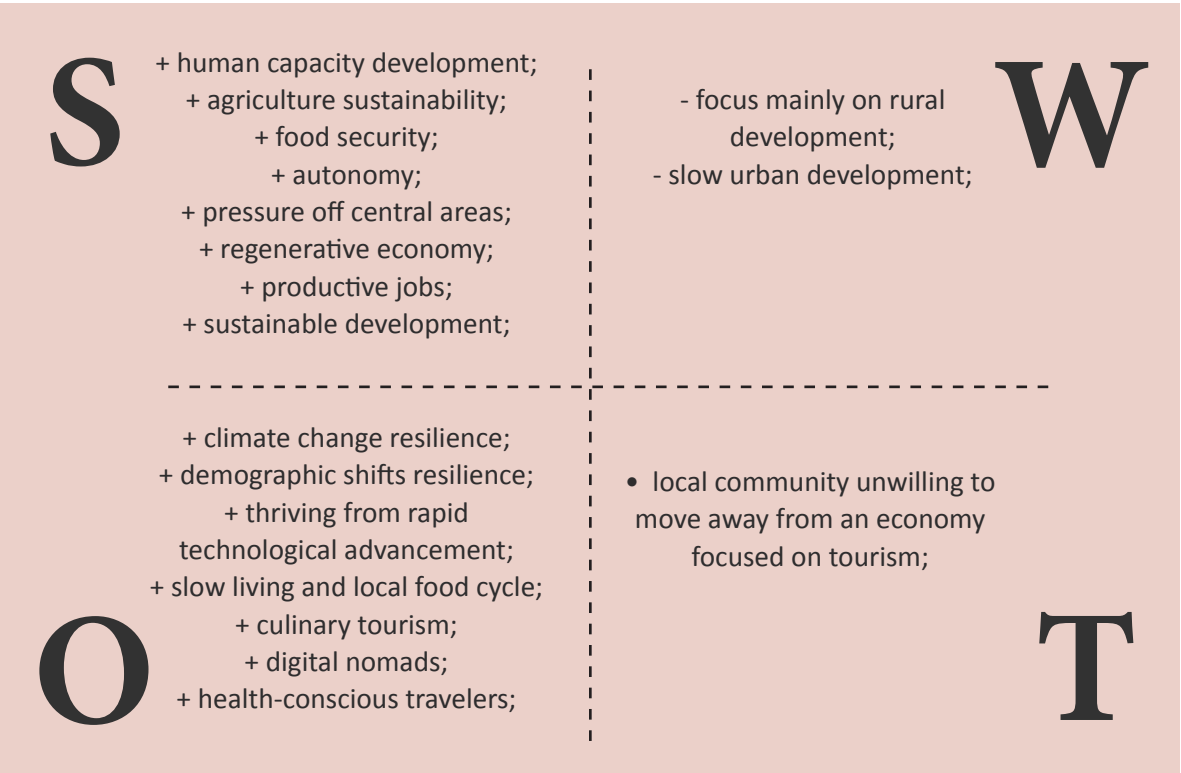
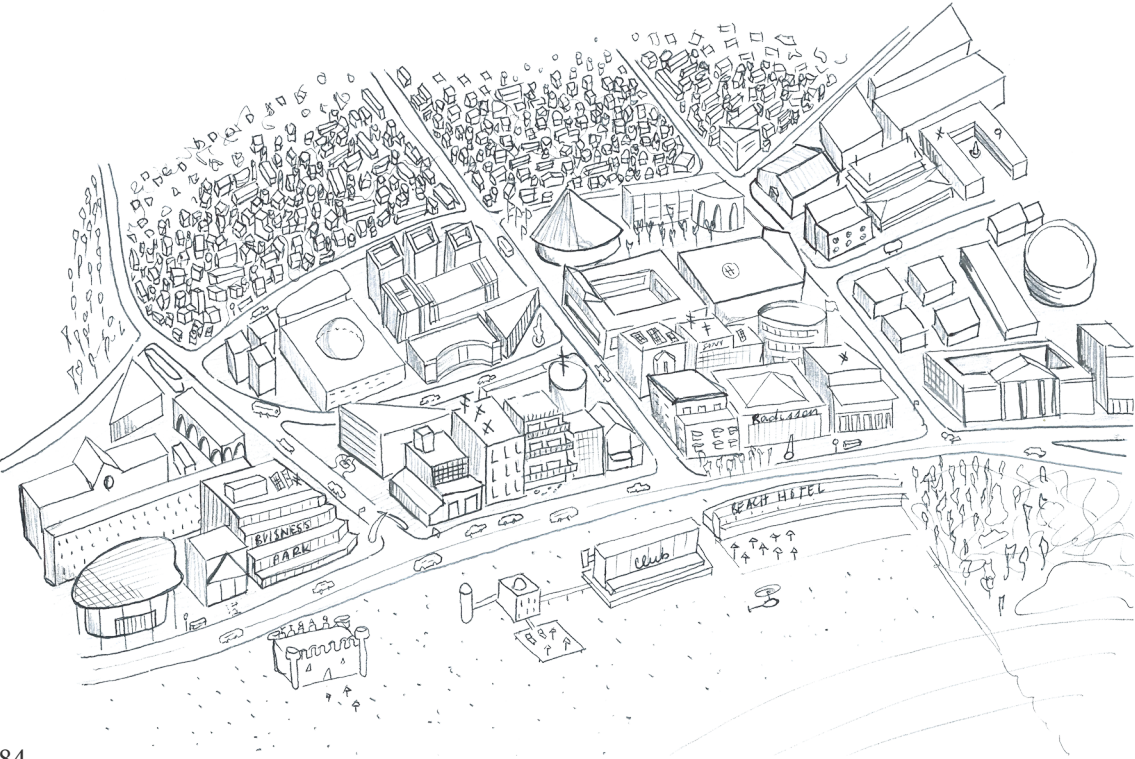


image 88: SWOT Analysis for Scenario 3

SCENARIO 4



image 89: SWOT Analysis for Scenario 4



2. TRENDS DIAGRAMS

The *Trends Diagrams* explore how current megatrends, as well as tourism-related trends, would work in relation to the four scenarios.

GLOBAL TRENDS: EFFECT ON SCENARIOS				
	1	2	3	4
globalization	+			++
climate change		++	+	
urbanization	+			++
demographic shifts	+	+	++	+
changes in global economic power				++
rapid technological development		++	+	
slow living		+	++	
cycling popularity	++	+		
urban food growth		+	+	
local food cycle		+	++	
local conflicts	+	+	+	

TOURISM TRENDS: EFFECT ON SCENARIOS				
	1	2	3	4
culinary tourism			++	
work and travel opportunities	+			++
digital nomads		++	+	
community focused hotels	++	+		
health-conscious traveler	+		+	
family travelers		+	+	+
solo travelers	+	+	+	+

image 90. Trends Diagrams

Cities and regions are competing with each other for wealthy and educated inhabitants and investments. Tourism destinations are competing with each other for attracting tourists. Strategic thinking means being aware of your competition. It means knowing your strengths, weaknesses, opportunities and threats and creating a strong vision for the future. In cases with high uncertainty about the future, scenario planning can be a powerful tool used in strategic thinking.

CONCLUSIONS AND FINAL REMARKS

OUTCOME

The future is uncertain, dynamic and complex. Unpredictability has been associated with the advance of science and general knowledge, which has interfered with socio-ecological systems and has generated new forces of development. Scenario-based strategic planning accounts for complexity in an uncertain world.

This thesis set out to demonstrate the usability of scenario planning in the case of Malindi and to build knowledge regarding scenario making.

The research process started with a *Literature Review* which examined the impact of tourism growth in the shaping of the social, economic, and urban development of the coastal Kenyan town Malindi. The *Theoretical Framework* revealed the shortcomings of traditional strategic planning in situations with high uncertainty regarding the future (such as the case of Malindi), proposed scenario planning as a tool for steering strategic choices towards a compelling long-term vision, and gave a thorough description of the methodology behind scenario planning. The *Analysis* chapter examined the current sociospatial conditions of Malindi and revealed recent urban planning and design project proposals aimed at improving the development of the town.

As a result, the study created a framework of practical tools for addressing complex situations with the help of scenario planning. To exemplify the scenario - planning method, four alternative scenarios for Malindi were formed based on the information gathered in the research chapters.

The main research question of the thesis was: *How can scenario planning facilitate a stronger vision for sustainable urban renewal and economic development in Malindi?*

The main achievements of this thesis are creating a scenario-planning framework that can be applied to similar cases, and modeling the scenario planning process over the Malindi case.

EVALUATION OF THE THESIS
PROCESS AND METHODS

The longest part of the thesis has been finding the subject. After years of schooling during which students always receive clear assignments, choosing a thesis topic among unlimited possibilities was a challenging change. To narrow down the possibilities, I decided on searching for a planning project in the developing world because of my specific interest in the subject, as well as my previous workshops experience with urban planning and design in Tanzania, Shanghai, and Rio de Janeiro.

The initial prospect (2014-2015) was an urban planning project for a community part of the Tanzania Federation of the Urban Poor (TFUC) who wanted to relocate on a recently bought land in the town of Morogoro. This project came through a contact formed with the Centre for Community Initiatives (CCI) Tanzania during the *Cities in Transition* workshop I attended in 2013. However, after close to a year of preparations and discussions with CCI, it was revealed that the land bought by the Morogoro TFUC community was, in fact, part of the municipal reserves. The TFUC community members who bought the land did not have legal rights to build houses on that land. My understanding is that the community

was planning to start building informal houses, hoping to settle the legal issues at a later stage. It was thus time for me to step out, despite the setback.

A new possibility for the thesis as a competition entry in the *International Design Collaboration for Kenya* (IDCK) competition arose in 2016. I visited Malindi in spring 2016 with the background information gathered from the competition brief. My aim at that time was to produce ideas for an urban design proposal that would respond to the competition requirements. However, my visit to Malindi revealed unsettling discrepancies between the ideas presented in the competition brief, which described Malindi as a lively and attractive tourist destination, and the local situation. The challenges Malindi was facing were more complex than the competition expressed them.

The final idea for the thesis came in spring 2017: taking a step back from the quick-fix design-based solutions which the Kilifi county planning office was wishing for (as a hope to revitalize the tourism industry), and responding instead with a sustainable long-term strategic planning vision. The thesis then started with research over the history of the Kenyan Coast and the development of the Malindi town, which led to gaining a deep understanding of the complexity of the impact of tourism in Malindi. A key finding in the beginning stages of the research was Butler's tourism life cycle model (Butler 1980), which revealed Malindi's tourism development trajectory. It became clear that sustainably rejuvenating the tourism industry can only be achieved with a radical shift in touristic strategy. Furthermore, research also emphasized that Malindi must not delay diversifying its economy. The main writing of *Part One: Literature Review* was done in spring 2017.

Part Two: Analysis was also drafted at the same time. It was the natural continuation to the previous chapter, a mix of research and analysis, focusing less on history and more on the current situation. The aim was to understand what efforts were already being made towards addressing the challenges Malindi was facing. Analyzing the current urban development plan for Malindi and exploring the local resources and potential for economic development revealed the need for Malindi to build a stronger, bolder future vision.

The thesis work continued in autumn 2018, updating the *Analysis* chapter and researching a way to connect the complex case of Malindi to a sustainable strategic planning solution. The research into the methodology behind scenario planning became the *Part Three: Theoretical Framework* chapter (written in autumn/winter 2018-2019). Studying scenario planning, the goal was to understand its application in urban planning practice as a tool to steer strategic choices towards a compelling long-term vision. The achievement of this part in the thesis was creating a revised framework which presents a theoretical angle for an applicable method of using scenario planning in urban planning practice. The scenario-planning method integrates well with the aim of adapting strategic planning to unpredictable futures.

In winter 2018/2019, the scenario planning method was applied to the Malindi case, generating the four scenario narratives presented in *Part Four: Scenario Development* (written in spring 2019). The thesis' final part aimed to demonstrate the usability of scenario planning in the case of Malindi and to build knowledge regarding scenario making through testing the scenario-planning framework. The study explored how Malindi town could develop and

what consequences specific choices would have on the development of the town. Two methods were used to present the scenarios: scenario diagram and scenario narratives. The scenario building study did not seek to be an answer covering all possibilities. However, the created scenarios cover a wide variety of projects, proposals, and possibilities and explore diverse economic strategies and values. Furthermore, it was essential to create all scenarios as equally plausible, equally qualified, and equally compelling.

The methods used in the thesis, literature review and theory review, site and current situation analysis, and scenario building, work well together. However, the scenario - building process would have been more rewarding done as a group because it would have generated more ideas. Working on the scenario - building process alone required significant effort and additional research in understanding topics outside my area of expertise, such as tourism as a business investment, economic strategies, agriculture processes, and new technologies¹. Therefore, working in a multidisciplinary team would have been very helpful. To compensate for this limitation, the scenario ideas were tested and discussed with people with experience in architecture, urban planning, business, economics, and planning in the developing world.

1. In the “Malindi Waterfront as Socio-ecological Infrastructure” entry to the IDCK competition, the team from Politecnico di Milano proposed two deep-water mooring docks that would act as a barrier, protecting the marine environment from the siltation coming from the Galana - Sabaki river, and would integrate tidal power turbines, creating electricity. These were exciting ideas; however, my research did not lead to any existing technology that would have realistic and cost-effective potential to integrate with the Malindi dock in the immediate future. Without more expert opinion, I was cautious to integrate these ideas into my proposals.

Receiving feedback about scenario plausibility from people of different fields was an essential part of adjusting the scenario drafts.

If there had been more time, the development of the scenarios would have benefited from a benchmarking exercise: looking at other scenario planning examples. The choice of not including benchmarking was partially related to my specific wish of finding scenario planning cases similar to Malindi: (ideally) locations characterized by high dependency on tourism, or cases of scenario planning used in developing countries. Because specific comparable cases were not found at an early stage of the scenario development, while at the same time the thesis work was already extensive and complex, the benchmarking exercise was no longer pursued.

LIMITATIONS OF THIS WORK

Mintzberg (1994) describes the three roles the planners have: planners as strategy finders, who discover strategies, visions; planners as analysts, who carry out analyses and study data; and planners as catalysts who encourage others to think creatively by raising questions (113). Therefore, it is understood that working in a team that includes all those types of planners brings strength to a project. Specifically taking about scenario planning projects, Schwartz (1991) explained how “[driving] forces often seem obvious to one person and hidden to another” (108). Because scenario planning requires brainstorming ideas, Schwartz’s recommendation is to always build scenarios in teams. I will take a step further suggesting scenario planning be done in multidisciplinary teams.

The lack of a multidisciplinary team was perhaps

the most significant limitation the thesis faced at the point of scenario development.

One of the problematic sides of choosing a project in a developing country can be the limitation of academic literature, site plans, and GIS data. A favorable element in my research has been the data and maps provided by UN-Habitat for the IDCK competition. Nevertheless, the literature on Malindi is limited, and, at first, finding reliable sources of information to support my assessment of the socioeconomic situation in Malindi was a slow process. However, as research progressed, more material was found. In the end, gaining an extensive familiarity with the subject was a useful process in understanding the troublesome situation of Malindi town, its current weaknesses and diverse opportunities for future development.

Another limitation was the briefness of the visit to Malindi in 2016, only 10 days, and the lack of a follow-up, more recent, visit. Ideal fieldwork would have been three to four weeks (Lindeman and Sandman 2018, 58). Furthermore, the 2016 visit was made with other objectives in mind (related to the competition). Therefore, the fieldwork study conducted in 2016 was not of direct use in the thesis. However, the interviews and personal site observations were vital elements in uncovering socioeconomic issues not addressed in the competition brief, which later became the starting point for research.

APPLICATION OPPORTUNITIES AND FURTHER STUDIES

The purpose of this work was not to provide quick solutions or design ideas, which was the intent of the IDCK competition. Instead, it aimed to rely

on careful analysis of the local condition and to propose an urban planning strategy which would sustainably shape the development of the town.

The main conclusion of the thesis is that scenario planning is highly relevant in the case of Malindi. The four narrations presented are only examples of possible scenarios Malindi could consider. They are powerful tools to inspire future planning activity. The scenarios are detailed and realistic; however, they were not created through participatory planning involving Malindi stakeholders. Their primary role is to exemplify the scenario planning method, which could be applied in a participatory setting, involving diverse local stakeholders and taking into consideration the aspirations of the local people. Nevertheless, the opportunities that emerge from the four scenarios provide meaningful insight into viable possibilities for the future development of Malindi and a good starting point for discussion.

The next phase in advancing the study beyond this thesis would be to connect local stakeholders, explain the scenario planning strategy, spark discussion around the four already created scenarios, and draw attention to where strategic decisions could lead. Further implementing the scenario planning method in a participatory setting would lead to the creation of other possible scenarios and forming a stronger vision for Malindi.

The accomplishment of building and testing the scenario planning framework is that it now facilitates easy application in similar situations, without extensive time spent in researching the process. The scenario planning method can be applied also in a small planning setting, but it is most efficient when used by a multidisciplinary team.

ACKNOWLEDGEMENTS

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I would like to thank my supervisor, professor Kimmo Lapintie, for overseeing my thesis. Without him, this work would have looked very different. It was a privilege to benefit from his remarkable academic knowledge. I am most thankful for his time, his valuable comments, and his high standards regarding academic writing. His *Planning Theory* lectures inspired me to appreciate planning theory discourse and became the starting point in justifying my scenario-based strategic planning research.

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During my visit to Malindi, it was a pleasure to have met Mrs. Agnes Kadzo Unda, national trustee of the Kenya National Union of Teachers, who introduced me to the socioeconomic challenges of Malindi. I am also thankful for my insightful conversations with Mr Laurence Kitsao Angore, community leader of the informal fishermen village, who helped me better understand local realities.

I owe a warm thank you to Katja Toivola and Stefan Eklof for pursuing the IDCK competition together with me, for the time we spent analyzing the realities of Malindi which helped me evaluate the complexity of this project.

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Many thanks to Ana Moryon for testing out the scenario narratives by illustrating them. Since the methods chosen to present the scenarios were in narrative and written description form, it became a useful experiment to test their coherence by having an outsider convey them in graphical form.

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IMAGE SOURCES

INTRO IMAGE PAGE 12. Inside Shella Village, Malindi 2016. Own image, taken in March 2016.

INTRO IMAGE PAGE 14. Inside Shella Village, Malindi 2016. Own image, taken in March 2016.

IMAGE 1. Benefits and Problems of International Tourism.
Own illustration, based on image from Belk and Costa 1995, page 39. (see List of References)

IMAGE 2. Tourism Area Cycle of Evolution.
Own graphic, based on image from Butler 1980, page 7, figure 1. (see List of References)

IMAGE 3. Tourism Trends.
Own illustration using icons made by Eucalyp, from www.flaticon.com.

IMAGE 4. Swahili Towns and the Portuguese, 15-16th Centurie.
Image by Kevin Shillington, from *History of Africa*.
<https://www.macmillanihe.com/companion/Shillington-History-Of-Africa/resources/>

IMAGE 5. Indian Ocean Trading Networks 10-16th Centuries.
Image by Kevin Shillington, *ibid*.

IMAGE 6. Kenya and East Africa.
Own illustration, base map by Bruce Jones Design.

IMAGE 7. Facts and Figures of Republic of Kenya
Information compiled from The World Fact Book, CIA. Updated January 23, 2019.
<https://www.cia.gov/library/publications/the-world-factbook/geos/ke.html>,

IMAGE 8. The Swahili Realm of Influence.
Image by Gerald Steyn 2015, page 56. (see Further Readings)

IMAGE 9. Swahili and Arab African Houses.
Image by Gerald Steyn 2015, page 69. *Ibid*.

IMAGE 10. Gedi Ruins Site Plan. 2001.
Image from <https://swahili.hypotheses.org/files/2013/10/Plan-Gedi-en-A4-Converted.jpg>

IMAGE 11 + IMAGE 12. Gedi Ruins 2016. Own images, taken in March 2016.

IMAGE 13. Distribution of Urban Areas in Kenya.
UN- Habitat 2015a, page 8. Own graphic. (see List of References)

IMAGE 14. Relationship between Urbanization and Economic Growth.
UN-Habitat 2012, page 38-39. (see List of References)

IMAGE 15. Urban Fabric of an Informal Settlement in Malindi Kenya.
Google Earth. Location: Sea Breeze neighborhood in Malindi.

IMAGE 16. Before and After Re-Blocking of Mtshini Mwau, Cape Town.
UN-Habitat 2016d, page 46. (see List of References)

IMAGE 17. Before and After In-Situ Upgrading Illustration.
UN-Habitat 2016d, page 44. (see List of References)

IMAGE 18. Curio Shops on the Beach in Malindi, 2016. Own image, taken in March 2016.

IMAGE 19 + IMAGE 20. Malindi Public Beach. Ibid.

IMAGE 21. Informal Fisherman Village Close to Malindi Beach. Ibid.

IMAGE 22. SWOT Analysis of Kenya’s Tourism Sector.
Towards a Sustainable Tourism Industry in East Africa, UNECA 2011, page 60. Own graphic. (see List of References)

IMAGE 23. Private Beach in Malindi, 2016. Own image, taken in March 2016.

IMAGE 24. Dreams of Africa Hotel in Malindi, 2016. Ibid.

IMAGE 25. Private Beach Access in Malindi, 2016. Ibid.

IMAGE 26 + IMAGE 27. Shella Village in Malindi, 2016. Ibid.

IMAGE 28. Maweni Informal Settlement in Malindi, 2016. Ibid.

IMAGE 29 + IMAGE 30. Ladies Selling Food in Maweni Informal Settlement of Malindi. Ibid.

IMAGE 31. Narrow Streets Inside SeaBreeze Informal Settlement, Malindi 2016. Ibid.

IMAGE 32. Impact of Tourism on Consumption in Malindi.
Own illustration using quotes from Wamwara and Cornwell 2008, page 103-106 (see List of References).

IMAGE 33 + IMAGE 34. A Space for Foreigners, a Space for Locals.
Own images, taken in March 2016. Scorpio Villas and Market in Maweni neighborhood.

IMAGE 35. Shella Village in Malindi, 2016. Own images, taken in March 2016.

IMAGE 36. Closed Curio Shops at Malindi Tourist Market in March 2016. Ibid.

IMAGE 37. Color of the Indian Ocean at Malindi Beach in March 2016. Ibid.

IMAGE 38. Malindi Tourism Development in Relation to the Butler Model Life Cycle.
Own illustration.

IMAGE 39. Kilifi County and Malindi Town: Road Connectivity within Kenya. Own graphic.

IMAGE 40. Facts and Figures of Malindi.
Own illustration based on data from UN-Habitat 2016a, KCG 2015. (See List of References)

IMAGE 41. Malindi Key Locations. Own illustration based on personal observations and KCG 2015 (see List of References). Base map: Google maps.

IMAGE 42. Malindi Population Projection
Data source: KCG 2015. (see List of References)

IMAGE 43. Malindi Municipality - Existing Landscape Structure. IDCK 2016, own graphic.

IMAGE 44. Malindi Town Land Use Graphic
Own graphic, data source: KCG 2015. (see List of References)

IMAGE 45. Impact of Galana Sabaki River Siltation Discharge at Malindi Beach.
Own image, taken in March 2016.

IMAGE 46. Organic Development of Residential and Commercial Areas in Malindi Town.
Own graphic based on KCG 2015. (see List of References), base map: Google maps.

IMAGE 47. Education, Industry, and Transportation in Malindi Town.
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IMAGE 48. Malindi Connectivity by Air: Distance, Cost, Time.
Own illustration and analysis. Study done 9.2.2019, calculating the cost and time of flights in Economy class for a week trip to Malindi on Wednesday 6.3.2019.
Distance: <https://www.distancefromto.net/>. Flight cost and time <http://momondo.com/>.
Direct flight time: <https://flighttime-calculator.com/>

IMAGE 50. Malindi Connectivity by Air: Domestic Tourism Potential.
Own illustration, base map: <http://www.kenyabrussels.com/ckfinder/userfiles/images/about%20Kenya/tourist%20brochures/tourist%20map.jpg>

IMAGE 51. Malindi as a Tourist Destination SWOT Analysis. Own illustration and analysis.

IMAGE 52. Key Ideas and Proposals for Malindi *Integrated Strategic Urban Development Plan*, explored during the capacity building workshop, 26 November 2014.
Own illustration based on information from Kilifi County Government 2015. (See List of References)

IMAGE 53. Vision Statement Defined at the Capacity Building Workshop.
Kilifi County Government 2015, xix. Own graphic. (see List of References).

IMAGE 54. Malindi Population Projection
Data source: KCG 2015. (see List of References)

IMAGE 55. IDCK Competition Proposal for Malindi: Malindi Alive.
UN- Habitat 2016c, page 88-97 (see List of References).

IMAGE 56. IDCK Competition Proposal for Malindi: Malindi Waterfront as Socio-ecological Infrastructure. UN- Habitat 2016c, page 88-97 (see List of References).

IMAGE 57. Photovoltaic Power Potential in Kenya.
The World Bank, solar resource data. www.solargis.com

IMAGE 58. Global Trends 2030. PcW 2016, page 20. (see List of References)

IMAGE 59. Urban Trends by World Regions, 1950-2050.
Image from EEA 2015, page 32. (see List of References)

IMAGE 60. Possibilities. Own illustration.

IMAGE 61 + IMAGE 62. Types of Futures. Conway 2003, slide 12, own graphic.

IMAGE 63. Purposive Categories of Futures - Thinking.
Own illustration based on Marinén 2002, page 270-271. (see List of References)

IMAGE 64. Differences Between Planning and Futures Studies.
Own illustration: characteristics listed by Shani 1974, page 647, and comments based on Khakee 2010, page 212-213. (see List of References)

IMAGE 65. Scenario Typology in Brief. van Notten et al. 2003, page 425. (see List of References)

IMAGE 66. Ducot and Lubben Scenario Typology. Ducot and Lubben 1980, page (see List of References)

IMAGE 67. Scenario Planning Components.
Chakraborty and McMillan 2005, page 25. (see List of References)

IMAGE 68. Scenario Typology.
Own illustration based on Börjeson et al. 2006, page 726-727 (see List of References)

IMAGE 69. Chakraborty and McMillan’s List of Preliminary Components.
Chakraborty and McMillan 2005, page 21. (see List of References)

IMAGE 70. Scenario Planning Process. Own illustration.

IMAGE 71. Phase III: Building Scenarios. Own illustration.

IMAGE 72. Building the Scenario Matrix.
Blanco et al. 2012, page 269. (see List of References)

IMAGE 73. Avin and Dembner’s Scenario Building Process.
Avin and Dembner 2001, own graphic. (see List of References)

IMAGE 74. Participatory Planning. Own illustration.

IMAGE 75. Malindi Scenario Planning Feasibility.
Own illustration, personal comments regarding Malindi. Feasibility steps source: “Factors that can lead to a favorable outcome of scenario planning” from Schoemaker 1991, page 550. (see List of References)

IMAGE 76. Malindi Scenario Building Process, Part 1: Focal Question.
Own illustration, personal analysis.

IMAGE 77. Malindi Scenario Building Process, Part 2: Driving Forces. Ibid.

IMAGE 78. Malindi Scenario Building Process, Part 3: Axes of Uncertainty. Ibid.

IMAGE 79+ IMAGE 80. Malindi Scenario Building Process, Part 4: Scenario Matrix. Ibid.

IMAGE 81. Concept Image for Scenario 1: Domestic Tourism and Business Economy Scenario.
Image created by Ana Moryon, 2019.

IMAGE 82. Concept Image for Scenario 2: Domestic Tourism and Agriculture Economy Scenario.
Image created by Ana Moryon, 2019.

IMAGE 83. Concept Image for Scenario 3: International Tourism and Agriculture Economy Scenario.
Image created by Ana Moryon, 2019.

IMAGE 84. Concept Image for Scenario 4: International Tourism and Business Economy Scenario.
Image created by Ana Moryon, 2019.

IMAGE 85. Malindi Scenarios Diagram. Own illustration, own analysis.

IMAGE 86 - IMAGE 89. SWOT Analysis for Scenarios 1 - 4. Own illustrations, own analysis.

IMAGE 90. Trends Diagrams. Own illustrations, own analysis.

FURTHER READINGS

A collection of articles and books providing additional coverage of the thesis subject. These readings were studied, but are not cited in the thesis.

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During spring 2016, Esther Waweru, Julian Ayier, and Nelson Ndirangu, a group of students from the Technical University of Kenya, visited Malindi in response to the International Design Collaboration for Kenya (IDCK) competition. The following text is Nelson Ndirangu's unedited report of their visit to Malindi:

DAY1

First of all we started our research along the beaches of Malindi on the day of our arrival.

What we observed there is that most of the hotels had been deserted and some shut down, only a handful were surviving.

This was also accompanied by bushes and a lot of dirt extending towards the shore line making the beach unattractive to walk on or enjoy for that matter...Overgrown corals were also covering a large chunk of the beach line thus hindering accessibility of some parts of the beach line.

It was also observed that there were no lights along the beach line and we also received warnings from the concerned locals that we should not stay till late or even wonder into some sections of the beach line due to presence of thieves and other dangerous characters well known as (wahuni).

DAY2

We started the day with a trip to Shela..there we were able to take pictures and collect more information.

The people of Malindi still use the Arabic form of architectural influence and also employ the Roman style a little bit. The area was characterized by unorganized settlements and some parts cannot be accessed by vehicles except by use of tuk-tuk which are very common there. The people put more emphasis of constructing houses then the remaining space is now used as streets. This has therefore resulted in dead ends of streets cropping up. People don't have a clear fence line between households .

The people of Malindi use coral blocks for the construction of their houses and also use of reeds(makuti)in Swahili they also use lime and stones and for special places they import building building blocks from India.

The people have piped water from the county government in most households and some have gone further to dig boreholes for use in the case of water shortages. The rich also play a key role in donating funds for establishment of the boreholes that the poor can also use.

We also observed subsistence farming around some households and the people mostly grow bananas, pawpaw, mangoes, sugarcane. The farming within the area is small scale. The people also take part in small scale trade of mangoes and some of their produce just at their door steps ..the shops in the area are located on the periphery of Shela .The people also keep cows .

We also spoke to one of the most informed people in Malindi who also gave us some insights into the situation of Malindi. His name is Mzee Omar bin Dhahman; He is a class three dropout former owner of the famous Malindi bus and also the donor of the land at a place that came to be known as Kisumu Ndogo a vital part of our study too. He donated the land to the Luo people who worked for his father in carving of coral blocks which they mix with lime and stones

According to his account:

Malindi was known as the NYIKA LANDS that were occupied by the duruma, chonyi digo and Swahili Arabs. The land tenure system back then had no regard for title deeds they use a philosophy that says[your title deed cannot argue with my chest]the Mijikenda who moved from Kaloleni came and took the land forcibly.Peoplefromotherplacesalso cameand boughtthelandandthat'swhen title deeds started to have a little significance ,even Mzee Dhahman has had to build a stone perimeter wall al round his farm just to prevent encroachment.

The main economic activities in Malindi unrelated to tourism are farming, fishing and small businesses.

Challenges Malindi experiences:

- Drug lords and drug abuse ,and according to them it's the politicians who bring the drugs and supply to the locals especially the youths.
- Poverty is really vibrant I the area due to high levels of unemployment.
- Poor educational facilities thus making education to crumble in the area, hence the people have less regard for education.
- They need support in agriculture in terms of equipment. The people's farms are mostly situated far from where they live since arable land is located far and also irrigation equipment is a challenge.
- Prostitution of young people.
- They feel ignored by the government.
- Water for agriculture is very inadequate.
- Occurrences of fires, for instance our informant had just had his 15 plus ha of mangoes and oranges plantation burnt to the ashes by a natural fire.

Collapse of the tourism and hotel industry in Malindi:

- Tourists flee feuds brought about by politics in the area and also the terror threats facing the area.
- Most tourists and the Italian settlers have their own cottages in which their fellow country men visiting Malindi opt to rent and stay in instead of staying in the hotels as it used to be.
- The kind of agricultural support they need
- They said they don't need roads and housing..rather they want agricultural help.
- They want things like fish ponds (mabirika ya samaki in Swahili)
- They want establishment of agricultural factories and food processing industries. Currently there is only one industry that processes mango juice but they need more industries.